CONTENTS OF SUPPLEMENT.

PERSONAL 157
Obituary 157
ENGINEERING SOCIETIES 157
Coming Technical Meetings 157
NEW PUBLICATIONS 158
Trade Publications 158
CONSTRUCTION NEWS:
Condensed List of Contracts Pending 158
Railways 159
Street and Electric Railways 159
Electric Light and Power 159
Bridges 160
Buildings 160
Water-Works 161
Sewerage 162
Garbage Disposal and Street Cleaning 162
Streets and Roads 162
Manufacturing Plants 162
Gas Plants 163
Miscellaneous Contracts 163
Contract Prices 163
Engineering Material Prices 164
INDUSTRIAL NOTES 164

PERSONAL

Mr. E. C. Dunn, City Engineer of Alexandria, Va., has resigned his position to accept a Government appointment in Maine.

Mr. Edward Trautman, of Whitewater, Wis., has been appointed Superintendent of Water-Works of Menominie, Wis., to succeed Mr. Gray.

Mr. J. B. West has resigned his position as Superintendent of the Water-Works of Marietta, O., the resignation to take effect on July 1.

Mr. Hugh Bonner has resigned his position as Chief of the Fire Department of the City of New York. Mr. Bonner will be succeeded by Deputy Chief Edward F. Croker.

Prof. Charles F. Chandler, of the School of Mines, of Columbia University, has been nominated as President of the Society of Chemical Industry now in session at Glasgow.

Mr. W. H. McDoel, Vice-President and General Manager of the Chicago, Indianapolis & Louisville Ry., has been elected President, to succeed Gen. Samuel Thomas, resigned.

Mr. A. G. Palmer has been appointed Superintendent of the new Pennsylvania Division of the New York Central & Hudson River R. R., with Mr. L. J. Carmalt as Division Engineer.

Mr. R. W. Raymond, the Secretary of the American Institute of Mining Engineers, has changed his office address to 99 John St., New York, in the Phelps-Dodge Building.

Mr. Alfred Lovell, Assistant Superintendent of Motive Power of the Northern Pacific Ry., has been appointed Superintendent of Motive Power, to succeed Mr. Wm. Forsyth, who has resigned.

Rear-Admiral Edwin Stewart, Chief of Bureau of Supplies and Accounts of the Navy Department, and Paymaster-General of the U. S. Navy, will be retired from active service on May 5, aged 62 years.

Mr. William Leggett Guillaudeu, Vice-President and Traffic Manager of the Old Dominion Line of Steamers, has been elected to the presidency of that company, to succeed the late Capt. Henry A. Bourne.

Mr. W. E. Harvey, Assistant Engineer of the Illinois Central R. R., at Chicago, Ill., has been appointed Division Engineer of the Fort Dodge & Omaha extension of the Illinois Central R. R., with headquarters at Logan, Ia.

Mr. Robert S. Cox, Vice-President and General Manager of the Terre Haute Car Co., has been appointed District Manager at Buffalo, N. Y., for the American Car & Foundry Co., with Messrs. A. B. Neill and George Mitchell as Assistants.

Mr. Wm. Forsyth has resigned his position as Superintendent of Motive Power of the Northern Pacific Ry. He was formerly Mechanical Engineer of the Chicago, Burlington & Quincy R. R., and went to the Northern Pacific Ry. in September, 1898.

Col. Robert O. Burke has been appointed Superintendent of Sewers of Chicago, to succeed Mr. Frank E. Davidson, resigned. Mr. Robert B. Wilcox, Assistant City Engineer, has been appointed to succeed Col. Burke in the charge of Rivers, Harbors and Docks.

Mr. W. L. Breckinridge has been appointed Chief Engineer of the Chicago, Burlington & Quincy R. R., with headquarters at Chicago, to succeed Mr. E. J. Blake, who has been appointed Consulting Engineer, vice Mr. Robert J. McClure, deceased.

Mr. J. E. Greiner has been appointed Engineer of Bridges and Buildings on the lines of the Baltimore & Ohio R. R., east of the Ohio River. As far as the designing of new bridges is concerned, he will also remain Engineer of Bridges on the lines west of the Ohio River.

Mr. George H. Dunlop, C. E., of Melbourne, Victoria, Australia, is again visiting this country, and is negotiating for the use of his tunnel lining system on certain new work. This system of timber lining has been used in sewer tunnels in Melbourne, and was described and illustrated in our issue of Dec 29, 1898.

Messrs. Carl E. Grunsky, M. Am. Soc. C. E.; Marsden Manson, M. Am. Soc C. E., and Charles S. Tilton, City and County Engineer, have been appointed by the Supervisors of San Francisco county as a board of engineers to examine into the condition of the drainage facilities of the city of San Francisco, and to prepare plans and an estimate of the cost of the proposed work.

Messrs. William T. Hunt, of Essex county; Col. Charles W. Fuller, of Hudson county; Charles F. Harrington, of Bergen county; Mayor John Hinchliffe, of Passaic, and David L. Wallace, of Essex county, have been appointed by Governor Voorhees, of New Jersey, as Members of the State Sewerage Commission. The principal work of the Commission will be the institution of a system to prevent the pollution of the Passaic River.

Mr. William Pierson Judson, M. Am. Soc. C. E., of Oswego, N. Y., has been appointed Deputy State Engineer and Surveyor of New York, to succeed Mr. Herschel V. Roberts, who has resigned. Mr. Judson was born in Oswego in 1849, and began practice in 1867. He has done a large amount of harbor and fortification work for the United States Government along the St. Lawrence River, Lake Ontario and Lake Champlain, and was engaged on the surveys of the Deep Waterways Commission in 1896. More recently Mr. Judson has been engaged in consulting engineering work on various projects for water power development.

Mr. Schuyler Hazard, M. Am. Soc. C. E., President of the Engineers' Club of Cincinnati, has entered into a partnership with Mr. Thomas Lee, under the name of Lee & Hazard, with offices at 209 to 213 Race St., Cincinnati, O. Mr. Hazard graduated from the Massachusetts Institute of Technology in 1880, and after a short service with the Pittsburg, Cincinnati, Chicago & St. Louis Ry. He was promoted to the office of Assistant Division of the Cleveland, Cincinnati, Chicago & St. Louis Ry. He was promoted to the office of Assistant Engineer in the Maintenance of Way Department of the Cleveland and Cincinnati Divisions, then to Engineer, and finally to Principal Assistant Engineer of the entire system, from which position he has resigned to enter mercantile life.

OBITUARY.

Mr. Joseph W. Geary, mining engineer, died at Cumberland, Md., on April 24, aged 70 years.

Mr. Ezra S. Ely, civil engineer, died at his home at Fredonia, N. Y., on April 25, aged 74 years.

Mr. Benjamin Eastwood died at his home in Paterson, N. J., on April 25, aged 50 years. He was President of the local Board of Trade and head of the Eastwood Machine Works.

Capt. Alfred E. Hunt, M. Am. Soc. C. E., President of the Pittsburg Reduction Co., and prominent in the development of the aluminum industry in this country, died suddenly on April 26, at the Hotel Lafayette, Philadelphia, Pa. A full obituary notice of Mr. Hunt will be published in our next issue.

ENGINEERING SOCIETIES.

COMING TECHNICAL MEETINGS.

CHICAGO ELECTRICAL ASSOCIATION.
May 5. Secy., J. R. Cravath, 825 Monadnock Block, Chicago, Ill.
BROOKLYN INSTITUTE OF ARTS AND SCIENCES.
May 5. Secy., Henry I. Weed, Brooklyn Institute of Arts and Sciences, Brooklyn, N. Y.
THE ENGINEERS' CLUB OF PHILADELPHIA.
May 6. "Modern Mine Haulage Practice," Harry K. Meyers. Secy., L. F. Rondinella, 1122 Girard St., Philadelphia, Pa.
ENGINEERS' CLUB OF ST. LOUIS.
May 7. Secy., E. R. Fish, 2401 N. Spring Ave., St. Louis, Mo.
ENGINEERS' CLUB OF KANSAS CITY.
May 8. Secy., F. W. Tuttle, Baird Bldg., Kansas City, Mo.
THE LOUISIANA ENGINEERING SOCIETY.
May 8. Secy., J. F. Coleman, 712 Union St., New Orleans, La.
NEW ENGLAND RAILWAY CLUB.
May 9. Secy., Edw. L. Janes, P. O. Box 1158, Boston, Mass.
NORTHWEST RAILWAY CLUB.
May 9. Secy., T. A. Foque, Soo Line, Minneapolis, Minn.
DENVER SOCIETY OF CIVIL ENGINEERS.
May 9. Secy., W. B. Lawson, 36 Jacobson Bldg., Denver, Colo.
AMERICAN SOCIETY OF MECHANICAL ENGINEERS.
May 9-12. Spring meeting, Washington, D. C. Secy., F. R. Hutton, 12 West 31st St., New York city.
WESTERN FOUNDRYMEN'S ASSOCIATION.
May 10. Annual meeting. Secy., B. M. Gardner, 1522 Monadnock Block, Chicago, Ill.
AMERICAN INSTITUTE OF ARCHITECTS (New York Chapter).
May 10. Secy., Chas. I. Berg, 10 West 23d St., New York city.
CANADIAN SOCIETY OF CIVIL ENGINEERS.
May 11. Secy., H. C. McLeod, 112 Mansfield St., Montreal, Que.
FRANKLIN INSTITUTE.
May 11. Discussion, "Hydraulic Transmission, Valves and Packing;" May 16. "Recent Progress in the Liquefaction of Gases," Dr. Harry F. Kerre. Secy., Wm. H. Wahl, 15 South 7th St., Philadelphia, Pa.
BROOKLYN ENGINEERS' CLUB.
May 11. Secy., A. J. Provost, Jr., 191 Montague St., Brooklyn, N. Y.
ENGINEERING ASSOCIATION OF THE SOUTH.
May 11. Secy., H. M. Jones, 1000 Broad St., Nashville, Tenn.
WISCONSIN STATE CHEMICAL ASSOCIATION.
May 12. Secy., I. Ladoff, 154 Knapp St., Milwaukee, Wis.
ST. LOUIS RAILWAY CLUB.
May 12. Secy., H. H. Roberts, 511 Commercial Bldg., St. Louis, Mo.
CENTRAL RAILWAY CLUB.
May 12. Secy., H. D. Vought, 114 Fifth Ave., New York city.
MONTANA SOCIETY OF ENGINEERS.
May 13. Secy., A. S. Hovey, National Bank Bldg., Helena, Mont.
TECHNICAL CLUB OF OMAHA.
May 15. Secy., J. Harry Lawrie, Omaha, Neb.
ENGINEERS' CLUB OF MINNEAPOLIS.
May 15. Secy., H. E. Smith, 1620 S. E. 14th St., Minneapolis, Minn.
ENGINEERS' AND ARCHITECTS' CLUB OF LOUISVILLE.
May 15. Secy., Marshall Morris, 16 Norton Bldg., Louisville, Ky.
CIVIL ENGINEERS' CLUB OF CLEVELAND.
May 16. Secy., Wm. H. Searles, Case Library Bldg., Cleveland.
AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS
May 16. Annual meeting. Secy., Ralph W. Pope, 26 Cortlandt St., New York city.
WESTERN RAILWAY CLUB.
May 16. Secy., F. M. Whyte, 225 Dearborn St., Chicago, Ill.
ENGINEERS' SOCIETY OF WESTERN PENNSYLVANIA
May 16. Secy., R. A. Fessenden, 410 Penn Ave., Pittsburg, Pa.
AMERICAN FOUNDRYMEN'S ASSOCIATION.
May 16-19. Annual meeting, Pittsburg, Pa. Secy., John A. Penton, Buhl Block, Detroit, Mich.
AMERICAN WATER-WORKS ASSOCIATION.
May 16-18. Annual meeting, Columbus, O. Secy., Peter Milne, 95 Williams St., New York city.
AMERICAN SOCIETY OF CIVIL ENGINEERS.
May 17. Secy., C. W. Hunt, 220 W. 57th St., New York city.
WESTERN SOCIETY OF ENGINEERS.
May 17. Secy., N. L. Litten, Monadnock Block, Chicago, Ill.
BOSTON SOCIETY OF CIVIL ENGINEERS.
May 17. Secy., S. E. Tinkham, City Hall, Boston, Mass.
ENGINEERS' CLUB OF CINCINNATI.
May 18. Secy., J. F. Wilson, P. O. Box 333, Cincinnati, O.
SOUTHERN AND SOUTHWESTERN RAILWAY CLUB.
May 18. Secy., F. A. Charpiot, P. O. Box 13, Savannah, Ga.
NEW YORK RAILROAD CLUB.
May 18. Secy., W. W. Wheatley, 168 Montague St., Brooklyn, N. Y.
ROCHESTER ENGINEERING SOCIETY.
May 19. Secy., John F. Skinner, Reynolds Library Bldg., Rochester, N. Y.
THE DETROIT ENGINEERING SOCIETY.
May 19. Secy., Henry Goldmark, Wayne Co. Savings Bank Bldg., Detroit, Mich.
ENGINEERS' CLUB OF COLUMBUS.
May 20. Secy., H. M. Gates, 12½ North High St., Columbus, O.
NATIONAL ELECTRIC LIGHT ASSOCIATION.
May 23-25. Annual meeting, New York. Secy., Geo. F. Porter, 136 Liberty St., New York city.
TECHNICAL SOCIETY OF THE PACIFIC COAST.
June 2. Secy., O. Von Geldern, 819 Market St., San Francisco, Cal.
ENGINEERING SOCIETY OF WESTERN NEW YORK.
June 5. Secy., H. J. March, Library Bldg., Buffalo, N. Y.
FOUNDRYMEN'S ASSOCIATION (Philadelphia).
June 7. Secy., Howard Evans, Pier 45, N. Delaware Ave., Philadelphia, Pa.
THE WESTERN GAS ASSOCIATION.
June 14-16. Annual meeting, Milwaukee, Wis. Secy., Jas. W. Dunbar, New Albany, Ind.

CIVIL ENGINEERS' CLUB OF CLEVELAND.—A regular meeting of this club was held on April 26. The topic for discussion was the advisability of making manual training a part of a high school course.

FRANKLIN INSTITUTE.—A meeting of the Electrical Section of the Institute was held on April 25. Prof. W. S. Franklin, of Lehigh University, exhibited a Nernst incandescent lamp and explained its principle and operation.

SCRANTON ENGINEERS' CLUB.—A regular meeting of this club was held on April 20. The paper of the evening, entitled "Anthracite in Peru," was presented by Mr. William Griffith, who illustrated his address with a number of stereopticon views.

ENGINEERS' CLUB OF ST. LOUIS.—A meeting of this club was held on the evening of April 19 to celebrate the 30th anniversary of the club's incorporation. In addition to a musical program, a paper, entitled "The Engineers' Club of St. Louis, Its History and Work," was presented by Mr. W. H. Bryan. E. R. Fish, Secy.

AMERICAN INSTITUTE OF MINING ENGINEERS.—A circular just issued by the Secretary of the Institute, Mr. R. W. Raymond, gives notice of the removal of the secretary's office to 99 John St., New York city. It further states that the October meeting of the Institute will be held in San Francisco, Cal., the exact date to be determined later.

WESTERN FOUNDRYMEN'S ASSOCIATION.—The regular monthly meeting of this association was held at the Great Northern Hotel, Chicago, Ill., on April 19. The meeting was given up to a discussion of methods for increasing the interest in the work of the association among founders and for enlarging the membership. It was announced that the annual meeting would be held on May 10 to avoid conflicting with the annual meeting of the American Foundrymen's Association, to be held in Pittsburg on May 16-19.

AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS.—A regular meeting of the Institute was held at the House of the American Society of Mechanical Engineers, New York city, on April 26. The evening was devoted to a topical discussion on "The Limitation of Power Subdivision by Electric Motors in Manufacturing Establishments."

The next meeting, to be held on May 16, will be the annual business meeting for the consideration of reports and the election of officers.

THE PITTSBURG FOUNDRYMEN'S ASSOCIATION.—The regular monthly meeting of this association was held on April 24, with about 30 concerns represented. Considerable time was taken up with a discussion of the arrangements for the meeting of the American Foundrymen's Association. The question of sand conveying and apparatus for this work was also discussed, and the meeting concluded with an informal talk by Mr. Philip Moran, of the Keystone Bridge Works, Pittsburg, Pa., on "The Use of Sandless Pig Iron." His experience indicated that this form of pig iron was cheaper, easier on the cupola and produced better castings.

IRON AND STEEL INSTITUTE.—The annual meeting of the Institute will be held May 4 and 5 at the house of the Institution of Civil Engineers, Great George St., Westminister, London, England, and the following papers

will be presented: "On the Diffusion of Iron," Profs. J. O. Arnold and Mr. A. McWilliams, Sheffield; "On the Gellivare Iron Ore Mines," H. Bauerman, London; "On the Use of Blast-Furnace and Coke-Oven Gases," E. Disdier, Bilbao; "On the Wellman Tilting Furnace," A. P. Head, London; "On the Solution Theory of Iron and Steel," Baron H. Juptner von Jonstorff, Donawitz, Austria; "On Exploring for Iron Ore with the Magnetic Needle," by Prof. H. Louis, Newcastle-on-Tyne; "On Theories and Facts Relating to Cast-Iron and Steel," Bertrand S. Summers, Chicago, Ill.; "On the Manfacture of Steel Direct from the Ore in the Blast-Furnace," D. Tschernoff, St. Petersburg; "On the Use of Hot Blast in the Bessemer Process," Prof. J. Wiborgh, Stockholm. Bennett H. Brough, Secy.

RAILWAY SIGNALING CLUB.—The last regular meeting of the season was held at the Great Northern Hotel, Chicago, on April 25, about 25 members being present. A considerable portion of the time was occupied by a discussion of means for advancing the interests and importance of the club, and a discussion on topical subjects. The latter turned largely on the use of yellow for distant signal lights, as recently adopted by the New York, New Haven & Hartford R. R., and Mr. W. H. Elliott (C., M. & St. P. Ry.) and Mr. W. W. Salmon (Hall Signal Co.) referred to the difficulty in getting a thoroughly satisfactory shade of yellow. Mr. Salmon stated that yellow is used in France for a signal allowing a train to pull out from a side track upon the main track, and that mistaking a yellow distant signal for a white or red light would cause no trouble. In both cases it would mean that an engineman would slacken speed until he discovered the mistake, since a white light (being no signal) would indicate "stop," as would a red light. Mr. E. E. Russell Tratman (Associate Editor of Engineering News) thought it a great advance to have a distinctive distant signal at night, and one which would have but a single light. While the double lense distant signal used on the Chicago & Northwestern Ry. is practically successful, it introduces an element of uncertainty, as an engineman having seen the green light must watch the signal to see if, on nearer approach, the red light also shows, the latter not being visible so far as the green light. He never knows, therefore, whether his distant signal will snow one or two lights.

Mr. A. M. Keppel, Jr. (Pennsylvania R. R.), read a paper on "Main Air Pipe and Connections for Electro-Pneumatic Signals and Switches" (Eng. News, April 27), describing the plant under his charge on the Pittsburg Division of the Pennsylvania R. R. In reply to questions, he stated that the Pittsburg plant includes 75 switches, and that although the galvanized pipe is used as a return for electric circuits, there has been no trouble from electrolysis.

A paper by Mr. W. H. Elliott on "The Inspection of Interlocking Plants" (Eng. News, April 27) was then presented, advocating the more systematic requirements for making and reporting inspections. He advocated the practice of monthly inspections, but also favored making extra inspections, so that an inspector never knew when his work would be checked up. Inspectors are required to make such reports as will prevent mere perfunctory examination and the general statement that the plant is "all right."

It was announced that the first volume of Proceedings would be issued in a few weeks. Two amendments to the constitution were adopted: (1) requiring all receipts and expenditures on the part of the secretary and treasurer to be endorsed by a member of the Executive Committee; (2) changing the time of the annual meeting from January to November. The next regular meeting will be held in September.

In the morning a number of the members visited Pacific Junction, on the Chicago, Milwaukee & St. Paul Ry., to inspect the new signal and interlocking plant, under the direction of Mr. Elliott and Mr. Tilton. We shall describe and illustrate this plant in a future issue.

NEW PUBLICATIONS.

SPECIFICATIONS FOR INTERLOCKING PLANTS; L. S. & M. S. Ry.—Prepared under the direction of E. A. Handy, M. Am. Soc. C. E., Chief Engineer; Samuel Rockwell, M. Am. Soc. C. E., Division Engineer, and E. D. Wileman, Signal Engineer. Paper; 8½ x 14 ins.; pp. 10; illustrated.

These standard specifications are very complete, and include the tower, interlocking machine, lead-out, pipe and wire connections, signals, switches, lamps, etc. The locking must be preliminary latch locking, and switch levers must be placed at the center of the frame, with signal levers at the ends. Detector bars are made in 16-ft. sections, put together with bolts, so that they can readily be repaired or renewed. Signal wires, carried underground, are placed in ½-in. pipes filled with oil, and having a trap of 2-in. pipe to collect water, which can be pumped out. Home signals are operated by pipe, distant signals by wire, and dwarf signals by either method. The illustrations show the interlocking connections to switches and derails, the built-up detector bar, and the oil pipe arrangement of signal wires.

TRADE PUBLICATIONS.

(The standard sizes for pamphlets and trade catalogues recommended by all the principal engineering societies of the United States are: 3½ x 6 ins., and 9 x 12 ins.)

THE CROSS OIL FILTER.—The Burt Mfg. Co., Akron, O. Pamph.; 3¾ x 8¼ ins.; pp. 12; illustrated.

This is a brief description of a device for filtering machine or engine oil.

CONTROLLERS, SWITCHES AND RHEOSTATS.—The Electric Controller & Supply Co., Cleveland, O. Circular.

This circular illustrates and very briefly describes a special form of motor controller.

ENGINES, BOILERS AND SAWMILL OUTFITS.—The Warren Machine Works, Warren, O. Pamph.; 9¼ x 12 ins.; pp. 36; illustrated.

This pamphlet is an illustrated description and price-list of portable engines, stationary engines, boilers and sawmill machinery.

ENGINES, STONE QUARRY MACHINERY, ETC.—Lord, Bowler & Co., Cleveland, O. Pamph.; 9¼ x 8 ins.; pp. 27; illustrated.

This pamphlet calls attention to the line of engines, feed-water heaters, and quarrying machines manufactured by this concern.

SHAFTING, HANGERS, PULLEYS, ETC.—City Machine Co., Cleveland, O. Pamph.; 3½ x 6 ins.; pp. 36; illustrated.

This little pamphlet is an illustrated price-list of iron pulleys, finished shafting, collars, couplings, hangers, and other articles manufactured by this company.

SECTIONAL WATER TUBE BOILERS.—Almy Water Tube Boiler Co., Providence, R. I. Pamph.; 8 x 5½ ins.; pp. 30; illustrated.

This pamphlet contains brief descriptions of the several types of "Almy" boiler, which is intended for steamships, river steamers, torpedo boats, yachts, and also for all kinds of stationary work.

THE PREMO CAMERA.—Rochester Optical Co., Rochester, N. Y. Paper; 8½ x 7 ins.; pp. 87; illustrated.

This is a well printed and fully illustrated catalogue and price-list of "Premo" cameras and their accessories. The cameras described range from the low-priced Pony Premo E to the Reversible Back Premo Special, which is as complete and serviceable an outfit as could be desired, either for amateur or professional use. Some of the special features of these cameras, which make them available for copying and enlarging, and for use with wide angle lenses, as well as for ordinary view-taking, are of particular interest to engineers and architects.

CONSTRUCTION NEWS.

CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

Bids to be opened.	Work.	Place.	See Eng. News.
May 4.	Hospital building, etc.,	Morris Plains, N.J.	Apr. 20
May 4.	Park work,	New York	Apr. 27
May 4.	Macadamizing, 11 roads,	Hackensack, N. J.	Apr. 27
May 5.	Electric plant,	Belgrade, Minn.	Apr. 27
	Advertised, Eng. News, Apr. 27 and May 4.		
May 5.	Hotel building,	Moulton, Ia.	Apr. 27
May 5.	Building plans,	Halifax, N. S.	Apr. 27
May 5.	Water-works,	Belgrade, Minn.	Apr. 27
	Advertised, Eng. News, Apr. 27 and May 4.		
May 5.	Brick sewer,	Bridgeport, Conn.	Apr. 13
	Advertised, Eng. News, Apr. 13 and 20.		
May 5.	Sewers and water-works,	Oshawa, Ont.	May 4
May 5.	Building plans,	Marion, S. C.	May 4
May 6.	Electric lighting,	Kent, O.	May 4
May 6.	School building,	Oneida, N. Y.	May 4
May 6.	Levee work,	West Memphis, Ark.	Apr. 13
	Advertised, Engineering News, Apr. 13.		
May 6.	Lock and dam,	St. Louis, Mo.	Apr. 13
	Advertised, Eng. News, Apr. 13 to May 4.		
May 6.	Cement,	Washington, D. C.	Apr. 20
	Advertised, Engineering News, Apr. 20.		
May 6.	Macadam roads, 9 miles,	Westshoals, Ind.	Apr. 27
May 6.	Sewerage system,	Charlottetown, P. E. I.	Apr. 27
May 6.	Steel roof, etc.,	Washington, D. C.	Apr. 27
May 6.	Raising iron bridge,	Washington, D. C.	Apr. 27
	Advertised, Engineering News, Apr. 27.		
May 6.	Water-works,	Glouster, O.	Apr. 27
May 6.	Boilers (6),	Chicago, Ill.	Apr. 27
May 8.	School building work,	Brooklyn, N. Y.	Apr. 27
May 8.	Gun forgings,	Washington, D. C.	Apr. 27
May 8.	Heating and ventilating,	Brockton, Mass.	Apr. 20
	Advertised, Eng. News, Apr. 20 and 27.		
May 8.	School bldg, sewers, etc.,	San Carlos, Ariz.	Apr. 20
May 8.	Sewers,	Elyria, O.	Apr. 20
May 8.	School building,	Pima, Ariz.	Apr. 13
May 8.	Dredging,	Peekskill, N. Y.	Apr. 13
	Advertised, Eng. News, Apr. 13 to May 4.		
May 8.	Electric lighting,	Harrisburg, Pa.	May 4
May 8.	Sewers,	Dayton, O.	May 4
May 8.	Engine houses (8),	Los Angeles, Cal.	May 4
May 8.	Hospital building,	New York, N. Y.	May 4
May 8.	Sewers,	Allegheny, Pa.	May 4
May 8.	Hospital building,	Indianapolis, Ind.	May 4
May 8.	Bulkheads,	Boston, Mass.	May 4
May 9.	Paving,	Schenectady, N. Y.	May 4
May 9.	Asphalt paving, etc.,	Cincinnati, O.	May 4
May 9.	Bridge,	Binghamton, N. Y.	May 4
May 9.	Water-works,	Kettle Falls, Wash.	May 4
May 9.	Feeder canal (13 miles),	Tampico, Ill.	Apr. 6
	Advertised, Eng. News, Apr. 6 to May 3.		
May 9.	Bridge complete,	Binghamton, N. Y.	Apr. 20
	Advertised, Eng. News, Apr. 20 and 27.		
May 9.	Heating,	Hallock, Minn.	Apr. 20
May 9.	Electric plant,	Moundsville, W. Va.	Apr. 20
May 9.	Bridge,	Birmingham, O.	Apr. 20
May 9.	Asphalt and brick paving,	Marion, Ind.	Apr. 27
May 9.	Electric plant franchise,	Midway, Ky.	Apr. 27
May 10.	Gravel roads (6),	Rockville, Ind.	Apr. 27
May 10.	Masonry arch,	Cleveland, O.	Apr. 27
	Advertised, Eng. News, Apr. 27 and May 4.		
May 10.	Buildings,	San Francisco, Cal.	Apr. 20
May 10.	Sewers,	Chicago, Ill.	Apr. 20
May 10.	Dredging,	New London, Conn.	Apr. 13
	Advertised, Eng. News, Apr. 13. to May 4.		
May 10.	Electric plant,	Galt, Ont.	Apr. 13
May 10.	Oil tanks (4),	Montreal, Que.	Apr. 13
May 10.	Concrete superstructure,	Buffalo, N.Y.	Apr. 13
	Advertised, Eng. News, Apr. 13 to May 4.		
May 10.	Bridges (2),	Boston, Mass.	May 4
May 10.	Storm sewers,	Ann Arbor, Mich.	May 4
	Advertised, Engineering News, May 4.		
May 10.	Water-works supplies,	Enterprise, Kan.	May 4
May 10.	Asphalt paving,	Indianapolis, Ind.	May 4
May 10.	School building,	Friday Harbor, Wash.	May 4
May 11.	Paving,	Boston, Mass.	May 4
May 11.	Water pipe, castings, etc.,	Newark, N. J.	May 4
	Advertised, Engineering News, May 4.		
May 11.	Excavating,	Brooklyn, N. Y.	May 4
May 11.	School building,	Sandy, Utah.	May 4
May 11.	Ice plant, and cold storage,	West Point, N.Y.	Apr. 13
	Advertised, Eng. News, Apr. 13 to May 4.		
May 11.	Plumbing and drainage,	New York	Apr. 20
May 11.	Filter beds,	Marlboro Junction, Mass.	Apr. 27
	Advertised, Eng. News, Apr. 27 and May 4.		
May 11.	Iron bridges (2),	London, O.	Apr. 27
May 11.	Asphalt paving, etc.,	Union, N. J.	Apr. 27
	Advertised, Eng. News, Apr. 27 and May 4.		
May 12.	Explosives,	Vicksburg, Miss.	Apr. 27
May 12.	Masonry dam,	White Plains, N. Y.	Apr. 27
	Advertised, Eng. News, Apr. 27 to May 11.		
May 12.	Bridges (5),	St. Joseph, Mo.	Apr. 27
May 12.	Buildings,	Crow Creek, S. Dak.	Apr. 20
May 12.	Dredging,	Mobile Bay, Ala.	Apr. 20
	Advertised, Eng. News, Apr. 20 to May 11.		
May 12.	Brick paving,	Minneapolis, Minn.	May 4
May 12.	Sewers,	Darby, Conn.	May 4
	Advertised, Eng. News, May 4 and 11.		
May 12.	Pier,	New York, N. Y.	May 4
May 13.	Granite blocks,	Brooklyn, N. Y.	May 4
May 13.	Dipper dredges (2),	Chattanooga, Tenn.	Apr. 13
	Advertised, Eng. News, Apr. 13 to May 4.		
May 13.	Electric plants (2),	St. Helena Isl., N. C.	Apr. 13
	Advertised, Eng. News, Apr. 13 to May 4.		
May 13.	Naphtha lamps,	Washington, D. C.	Apr. 20
	Advertised, Engineering News, Apr. 20.		
May 13.	Street lanterns,	Washington, D. C.	Apr. 20
	Advertised, Engineering News, Apr. 20.		
May 13.	Dock gates,	Boston, Mass.	Apr. 27
May 13.	Revetment and filling,	Toledo, O.	Apr. 27
	Advertised, Eng. News, Apr. 27 and May 4.		
May 13.	Boiler settings,	Yonkers, N. Y.	Apr. 27
May 15.	Macadam paving,	Petersburg, Va.	Apr. 27
	Advertised, Engineering News, Apr. 27.		
May 15.	Pipe sewers,	Elizabeth, N. J.	Apr. 27
May 15.	Paving blocks, etc.,	Haverhill, Mass.	Apr. 27
	Advertised, Engineering News, Apr. 27.		
May 15.	Paving, etc.,	Elizabeth, N. J.	Apr. 27
May 15.	Electric plant,	Whitecloud, Mich.	Apr. 27
May 15.	Macadamizing,	Plainfield, N. J.	Apr. 27
May 15.	Water pipe,	Wellsville, O.	Apr. 27
May 15.	Steam road roller,	Nanaimo, B. C.	Apr. 20
May 15.	Dredging, etc.,	Sandusky, O.	Apr. 20
	Advertised, Eng. News, Apr. 20 to May 11.		
May 15.	Dredging,	Huntington Harbor, N. Y.	Apr. 20
	Advertised, Eng. News, Apr. 20 to May 11.		
May 15.	Electric lighting,	Lebanon, Pa.	Apr. 20
May 15.	Steel bridges (6),	Honoluiu, H. I.	Apr. 20
May 15.	Railway,	Chili	Apr. 13
May 15.	Sewers,	Medford, Ore.	Mar. 30
May 15.	Church building,	Hartley, Ia.	Apr. 20
May 15.	Water-works,	Gold Hill, Ore.	Apr. 20
May 15.	Water-works,	Gallatin, Tenn.	Apr. 20
	Advertised, Engineering News, Apr. 20.		
May 15.	Main sewer, etc.,	Lead, S. Dak.	May 4
May 15.	Wagon road,	Astoria, Ore.	May 4
May 15.	Macadam paving,	Norwich, Ont.	May 4
May 15.	Sewers,	Quincy, Mass.	May 4
	Advertised, Engineering News, May 4.		
May 15.	School building,	Wakefield, Neb.	May 4
May 15.	Army barracks, etc.,	Fort Meyer, Va.	May 4
May 15.	City building,	Elwood, Ind.	May 4
May 15.	School building,	Franklin, Minn.	May 4
May 15.	Sewers, etc.,	Warren, Pa.	May 4
May 16.	Immigrant building,	Ellis Island, N.Y.H.	Apr. 20
	Advertised, Eng. News, Apr. 20 and 27.		
May 16.	Water pumps, etc.,	Ottawa, Ont.	Apr. 20
	Advertised, Eng. News, Apr. 20 to May 4.		
May 16.	Jail building,	Stillwater, Minn.	May 4
May 16.	Power dam, etc.,	Richmond, Va.	May 4
	Advertised, Engineering News, May 4.		
May 16.	Paving and sewers,	St. Louis, Mo.	May 4
May 17.	Iron bridge,	Norristown, Pa.	May 4
May 17.	Dead house,	Washington, D. C.	Apr. 20
May 17.	Sand, Fisher's Island,	N. Y.	Apr. 20
	Advertised, Eng. News, Apr. 20 to May 11.		
May 17.	Dredging,	Wisconsin.	Apr. 20
	Advertised, Eng. News, Apr. 20 to May 11.		
May 17.	Dredging, etc.,	Portchester, N. Y.	Apr. 20
	Advertised, Eng. News, Apr. 20 to May 11.		
May 17.	Sewerage system,	Auburn, Ill.	Apr. 20
	Advertised, Engineering News, Apr. 20.		
May 17.	Removing wreck,	Boston, Mass.	Apr. 27
May 17.	Excavating reservoir,	Clinton, Mass.	Apr. 27
	Advertised, Eng. News, Apr. 27 and May 4.		
May 17.	Infirmary building,	Norristown, Pa.	Apr. 27
May 17.	Boiler plant,	Columbus, O.	Apr. 27
May 18.	Electrical machinery,	London, England	Apr. 27
May 18.	Heat'g and ventilat'g,	Ellis Island, N.Y.H.	Apr. 20
	Advertised, Eng. News, Apr. 27 and May 4.		
May 18.	Pumping machinery,	Willimantic, Conn.	Apr. 27
	Advertised, Eng. News, Apr. 27 and May 4.		
May 18.	Dredging ship channel,	Baltimore, Md.	Apr. 13
	Advertised, Eng. News, Apr. 13 to May 4.		
May 18.	Removing rock, etc.,	Mystic River, Conn.	Apr. 20
	Advertised, Eng. News, Apr. 20 to May 11.		
May 18.	Dredging,	Stamford Harbor, Conn.	Apr. 20
	Advertised, Eng. News, Apr. 20 to May 11.		
May 18.	Granolithic steps,	Easton, Pa.	May 4
May 18.	Hospital building, etc.,	Orient (L.I.), N.Y.	May 4
May 18.	School building,	Farmington, Wash.	May 4
May 19.	Macadamizing,	Roselle, N. J.	May 4
	Advertised, Engineering News, May 4.		
May 19.	Pier work,	St. Joseph, Mich.	Apr. 20
	Advertised, Eng. News, Apr. 20 to May 11.		
May 19.	Sewers,	Cambridge, O.	Apr. 27
	Advertised, Engineering News, Apr. 27.		
May 20.	Dredging plant,	Buffalo, N. Y.	Apr. 20
	Advertised, Eng. News, Apr. 20 to May 11.		
May 20.	Asphalt paving,	Washington, D. C.	Apr. 27
	Advertised, Engineering News, Apr. 27.		
May 20.	Sewers,	La Junta, Colo.	May 4
May 20.	Steel bridge,	Walla Walla, Wash.	May 4
May 20.	Sewer pipe, etc.,	Norristown, Pa.	May 4
	Advertised, Eng. News, May 4 and 11.		
May 20.	School building plans,	Montgomery, Ala.	May 4
May 20.	School building,	Russell, Ia.	May 4
May 22.	W.-w'ks and electric plant,	Cullman, Ala.	May 4
May 22.	Water bonds,	Huntsville, Ala.	May 4
May 22.	School building,	Jamaica, Ia.	May 4
May 22.	Macadamizing, etc.,	Cincinnati, O.	Apr. 27
May 22.	Portland cement,	Louisville, Ky.	Apr. 27
	Advertised, Eng. News, Apr. 27 to May 18.		
May 22.	Brick paving,	Glens Falls, N. Y.	Apr. 20
	Advertised, Eng. News, Apr. 20 to May 11.		
May 22.	Excavating,	Oswego, N. Y.	Apr. 27
	Advertised, Eng. News, Apr. 27 to May 18.		
May 22.	Plumbing, etc.,	Ellis Island, N. Y. H.	April 27
	Advertised, Eng. News, Apr. 27 and May 4.		
May 22.	Bridge work,	Toronto, Ont.	Apr. 27
	Advertised, Eng. News, Apr. 27 and May 4.		
May 23.	Brick paving,	Watertown, Wis.	May 4
May 23.	Dormitory building,	Arkansas City, Kan.	May 4
May 24.	Steel bridges (5),	Aberdeen, S. Dak.	May 4
May 24.	Dormitory building,	Grand Forks, N.Dak.	May 4
May 24.	Dormitory building,	Orting, Wash.	May 4
May 24.	Hospital building,	Fort Steilacoom, Wash.	May 4
May 22.	Public lighting,	Vincennes, Ind.	Apr. 13
May 25.	Sewer system,	Johannesburg, S. Africa	Mar. 9
May 25.	Dredging,	Mississippi	Apr. 27
	Advertised, Eng. News, Apr. 27 to May 18.		
May 25.	Dredging,	Chicago, Ill.	Apr. 27
	Advertised, Eng. News, Apr. 27 to May 18.		
May 25.	Brick storehouse,	North Point, Md.	Apr. 27
	Advertised, Eng. News, Apr. 27 to May 18.		
May 25.	Harbor work,	Wisconsin	Apr. 27
	Advertised, Eng. News, Apr. 27 to May 18.		
May 25.	Boiler house, etc.,	Chicago, Ill.	May 4
	Advertised, Eng. News, May 4 and 11.		
May 25.	Buildings, etc.,	Puyallup, Wash.	May 4
May 26.	Colecting garbage, etc.,	Binghamton, N. Y.	May 4
	Advertised, Eng. News, May 4 to 18.		
May 27.	Bridge,	Washington, D. C.	May 4
	Advertised, Engineering News, May 4.		
May 27.	Water pipe,	Washington, D. C.	May 4
	Advertised, Engineering News, May 4.		
May 27.	U. S. building work,	San Francisco, Cal.	Apr. 27
	Advertised, Eng. News, Apr. 27 to May 4.		
May 27.	Water pipe, etc.,	Washington, D. C.	Apr. 27
	Advertised, Engineering News, Apr. 27.		

May 29. Fire-alarm system, New Orleans, La.....May 4
Advertised, Eng. News, May 4 to 25.
May 29. Movable dam, Louisville, Ky. .....May 4
May 29. Pumping engine, Allentown, Pa. .....May 4
Advertised, Eng. News, May 4 to 25.
May 31. Jetties, St. John's River, Fla. .....May 4
Advertised, Eng. News, May 4 to 25.
May 31. Improving water-works, Pendleton, Ore....May 4
Advertised, Eng. News, May 4 and 11.
May 31. Dams & shore protection, Rock Island, Ill..Apr. 27
Advertised, Eng. News, Apr. 27 to May 18.
May 31. Plate girder railway bridge, Joliet, Ill...Apr. 13
Advertised, Engineering News, Apr. 13.
May 31. Dredges (2), St. Louis, Mo.....Apr. 20
Advertised, Eng. News, Apr. 20 to May 25.
June 1. Plans for market, Leeds, England.....Feb. 16
June 1. Electric plant, Prineville, Ore. .....Apr. 13
June 1. Water and sewer bonds, Prescott, Ont....Apr. 27
June 3. Building, Harrogate, England.....Apr. 13
June 3. Removing rock, East River, N. Y.....May 4
Advertised, Eng. News, May 4 to 25.
June 3. Dredging, Keyport, N. J. .....May 4
Advertised, Eng. News, May 4 to 25.
June 5. Excavating reservoir, Clinton, Mass. ....Apr. 27
Advertised, Eng. News, Apr. 27 and May 4.
June 6. Hospital buildings, Auburn, Cal. .....Apr. 27
June 7. Electric plant, London, England.....May 4
June 10. Boiler house, Bremerton, Wash. .....May 4
June 10. Timber dry-dock, Mare Island, Cal. .....Apr. 13
June 15. Jail building, Oglethorpe, Ga.....May 4
June 27. Pumping engines (2), St. Louis, Mo.....May 4
June 30. Street work, Parabelem, Brazil.....May 4
June 30. Electric r'y (23 miles), Shanghai, China. Mar. 2
Advertised, Eng. News, Nov. 17 to Dec. 8.
July 5. Drainage system, New Orleans, La.....May 4
Advertised, Eng. News, May 4 to June 29.
Oct. 1. Electric street railway, Moscow, Russia..Mar. 9
No date. Garbage disposal plant, Savannah, Ga....May 4
Advertised, Eng. News, May 4 and 11.
" . Brick and stone paving, etc., Ithaca, N. Y. Apr. 20
Advertised, Eng. News, Apr. 20 to May 4.

RAILWAYS.

ARKANSAS & NORTHWESTERN.—W. Y. Foster, Pres., Hope, Ark., informs us that the line has been located and most of the right of way obtained between Hope and Stamps, Ark., 23 miles. The contract for clearing, grading, piling and bridge work was let on April 22 to H. Darhoff, Little Rock, Ark. Work was to begin in ten days. Ed. Knobel, Ch. Engr., Hope.

BLACK DIAMOND MINERAL & TIMBER BELT.—Incorporated, April 27, with a capital stock of $62,000, to build a 250-mile branch line of the proposed Black Diamond System, from Carlisle, Ky., to Jellico, Tenn. A. E. Boone, Promoter, Zanesville, O.

BRENTWOOD, CLAYTON & ST. LOUIS.—This company is reported to have been incorporated by C. L. Caldwell, Clayton, Mo., and others, with a capital stock of $70,000, to build from Brentwood to Clayton and other towns.

CANADIAN PACIFIC.—Reports state that this company has decided to construct immediately about 40 miles of branch lines to the different mining camps in British Columbia, including extensions from Greenwood to Deadwood, and from Eholt to Greenwood, Wellington and Central camps. H. J. Cambie, Div. Engr., Vancouver, B.C.

CHICAGO & NORTHWESTERN.—W. L. Baughn and others, of Harlan, Ia., have been appointed a committee to negotiate with the officers of this line for the construction of an extension from Kirkman to Harlan.

DENVER & MONTANA.—This company was incorporated in Colorado, April 27, with a capital stock of $1,000,000, to construct a railway from Brush, Colo., to Alliance, Neb., thus giving Denver a closer connection with the Montana line of the Burlington & Missouri River R. R. in Nebraska. G. W. Holdrege, J. G. Taylor and W. P. Durkee, of Omaha, Neb., are incorporators.

DOTHAN, HARTFORD & FLORIDA.—W. J. Jerkins, Hartford, Ala., an incorporator of this company, informs us that surveys have been made, but not all of the right of way nor the entire capital secured for this proposed line from Dothan to Hartford, Ala. Contracts will be let when capital has been secured. J. P. Pelham, Pres. and Mgr., Dothan, Ala.

ELK VALLEY COAL & IRON CO.—The directors of this company, at a meeting at Knoxville, Tenn., April 20, are reported to have decided to build three miles of railway from their mines to the Knoxville & Ohio branch of the Southern Ry., in Campbell county, Tenn. The mines have been leased to the Virginia & Southwestern Ry. & Furnace Co., and will be developed at once.

GREAT NORTHWEST CENTRAL.—Reports state that this line has been sold to T. G. Shaughnessy, Vice-Pres. of Canadian Pacific Ry. Co., Montreal, Que. It runs from Chater to Hamiota, via Rapid City, Manitoba, and will probably be extended to Battleford, N. W. T. J. A. Gemmill, Pres., Ottawa, Ont.

MINNEAPOLIS & ST. LOUIS.—It is announced that this company has decided to locate its proposed extension from New Ulm, Minn., south into Iowa, along the middle survey, passing through St. James and Sherburne, Minn., and Estherville, Spencer, Sioux Rapids and Storm Lake, Ia., 140 miles. Contracts will soon be let, as specifications are about completed. The maximum grade is 5%, and the maximum curvature, 3½°. Five iron bridges will be erected along the route by the Phoenix Bridge Co., the longest being a 2,500-ft. bridge over the Sioux River at Sioux Rapids. L. F. Day, Gen. Mgr.; H. B. Kelley, Ch. Engr., 1124 Guaranty Loan Bldg., Minneapolis, Minn.

MISSOURI MIDLAND.—Work is in progress on this new branch line from Columbia to Kennard, Mo., 9½ miles, under the direction of William Johnston, sub-contractor of Johnson Bros. & Faught, St. Elmo, Ill. Daniel B. Ely, Vice-Pres. and Gen. Mgr.; A. G. Kleinbeck, Ch. Engr., 404 Bank of Commerce Bldg., St. Louis, Mo.

OREGON SHORT LINE.—Corey Bros., Ogden, Utah, are reported to have been awarded the contract for building a number of sidetracks and for grading on the present system from Milford to Butte, Mont., and from Granger to Huntington; estimated cost, $40,000. J. C. O'Melveny, Ch. Engr., Salt Lake City, Utah.

PINE BLUFF & ARKANSAS RIVER.—Reports state that an extension of this line is contemplated from its present terminus at English, Ark., for a distance of ten miles. H. E. Martin, Gen. Mgr., Pine Bluff, Ark.

READING, LANCASTER & BALTIMORE.—Surveys are about to be made, according to reports, for the projected railway from the anthracite regions near Scranton, Pa., to Carpenter's Point, Perryville, Md., on the Chesapeake Bay, about 70 miles. D. P. Brewer & Co., 52 Broadway, New York, are said to be the financiers; J. P. McDonald & Co., 33 Wall St., New York, contractors.

ST. LOUIS, KANSAS CITY & COLORADO.—This line, now running from St. Louis to Union, Mo., will probably be extended to Versailles, in order to tap rich zinc, lead and coal regions in Cole, Miller and Morgan counties. Lt.-Gov. A. H. Bolte is interested. Adiel Sherwood, Receiver, Roe Bldg., St. Louis, Mo.

SEATTLE & SAN FRANCISCO RY. & TRANSPORTATION.—F. H. Whitworth, Ch. Engr., 411 New York Block, Seattle, Wash., informs us that this company is now being organized to build 35 miles of steam railway from Seattle to Black River Junction and Leary. Capital has been secured, and contracts will probably be let in two months. W. E. Guenis, Pres., 510 Pioneer Block, Seattle, Wash.

SOUTHERN PACIFIC.—William Hood, Ch. Engr., 4 Montgomery St., San Francisco, Cal., informs us that McMurtrie & Stone, San Francisco, have been awarded the contract for the grading, tunnel and masonry work on the proposed extension from Surf to Ellwood, Cal., 56.3 miles. About 5½ miles of track have been laid, and advance grading is under way.

TRANSYLVANIA.—This company has been incorporated, with a capital stock of $320,000, for the purpose of operating the Hendersonville & Brevard Ry., 22 miles in length. An extension of ten miles will probably be built. W. P. Potter, Pittsburg, Pa.; J. F. Hayes, Sapphire, N. C., and J. P. H. Cunningham, New Castle, Pa., are said to be interested.

TRENTON, LAWRENCEVILLE & PRINCETON.—We are informed that this proposed line from Trenton to Princeton, N. J., 10 miles, will be operated by steam over a private right of way. Contracts have been let to Vandergrift & Co., 311 Drexel Bldg., Philadelphia, Pa., and about five miles of grading has already been completed. Track-laying will begin this week, using a 65-lb. rail. There will be four ridges on the route. Jas. L. Branson, Pres., Langhorne, Pa.; E. G. Weir, Ch. Engr., Trenton, N. J.

WHEELING & LAKE ERIE.—Incorporated in Ohio, with $24,500,000 capital stock, to acquire the property of the Wheeling & Lake Erie Ry. Co., recently sold at judicial sale. Robert Blickensdorfer, Pres.; Alvin Krech, Vice-Pres.

WHITMIRE, NEWBERRY & AUGUSTA.—This company, which was chartered by the last General Assembly of South Carolina, has been organized with James McIntosh, Newberry, S. C., as chairman of the board of incorporators. It is proposed to build from Augusta to Newberry, via Edgefield and Saluda, 64 miles, and thence to Whitmire, 18 miles farther, where it will connect with the Georgia, Carolina & Northern division of the Seaboard Air Line. Others interested are: Jas. A. Spearman, Whitmire, S. C.; John C. Sheppard and N. G. Evans, of Edgefield, S. C.

STREET AND ELECTRIC RAILWAYS.

CLAREMONT, N. H.—The Claremont St. Ry. Co. is planing to construct the projected electric line this year. Hira R. Beckwith, Pres.

BENNINGTON, VT.—It is reported that W.F. Stone who recently bought the Green Mountain Summer Home Co.'s property at Woodford, will establish a summer resort at that place, and place in operation the Bennington & Woodford Electric R. R., which was badly damaged by last October's freshets.

ANDOVER, MASS.—The Andover & Tewksbury St. Ry. Co. has been organized with a capital stock of $75,000, to build from Andover Square to Tewksbury, via Ballardvale. Chas. F. Woodward, Wakefield, Mass.; Chas. H. Shattuck, Ballardvale, and Barnett Rogers, Andover, are promoters.

GARDINER, MASS.—Marcus A. Coolidge, Fitchburg, Mass., is reported to have received the contract for constructing the Gardiner, Westminster & Fitchburg Electric Ry.; work is to begin at once.

MILFORD, MASS.—Work is about to begin, according to reports, on the construction of the proposed Milford, Franklin & Woonsocket Electric Ry. E. K. Ray, Director, Woonsocket, R. I.; W. H. Tylee, Supt. of Construction, Springfield, Mass.

NEWPORT, R. I.—Reports state that a $20,000,000 syndicate, financiered by Tucker, Anthony & Co., Boston, will assume control of the Newport & Fall River St. Ry. Co., the Newport St. Ry. Co. and the Newport Illuminating Co.

PROVIDENCE, R. I.—Senator William D. Aldrich has introduced a bill into the General Assembly providing for the incorporation of the Providence & Woonsocket R. R. & Power Co., with a capital stock of $500,000. It is proposed to build between the cities named, via Manville, Albion, Lonsdale and Saylesville. John D. Turner, C. H. Staples and J. B. Carter are incorporators.

WICKFORD, R. I.—T. M. Lesher & Son, Easton, Pa., have begun the construction of that portion of the Sea View R. R. to run between Saundersville and Wickford. Wm. C. Clarke, Pres., Wakefield, R. I.

LARCHMONT, N. Y.—The Larchmont Horse Ry. Co. has been granted a 25-year franchise by the village trustees to build a trolley line. W. H. Campbell, Treas. and Supt. This company has also been granted a franchise in the village of Mamaroneck.

MOUNT VERNON, N. Y.—The council has granted a new franchise to the New York, Westchester & Connecticut Traction Co.

WEST SENECA, N. Y.—The Ridge Road & Lake Shore Ry. Co. has been incorporated with a capital stock of $40,000, to operate an electric line from West Seneca to Hamburg. Henry J. Pierce, Wm. B. Cutter and Clark L. Ingham are directors.

ELIZABETH, N. J.—The council has granted a franchise to the Elizabeth Ry. Co., controlled by Senator John Kean, permitting it to change the motive power on its lines from horse to electricity, and to build an extension towards Cranford. It is said that the franchise will be accepted.

RAHWAY, N. J.—The council granted a franchise, April 27, to the Westfield & Elizabeth St. Ry. Co.

ERIE, PA.—It is announced that Isaac A. Walker & Son, Girard Bldg., Philadelphia, have the contract for constructing the proposed street car line from Erie to Northeast.

GREENSBURG, PA.—It is announced that active steps are being taken for the extension of the Greensburg, Jeannette & Pittsburg Electric Ry., now operating between Greensburg and Manor, from Manor to Irwin. W. F. Sadler, Pres.

IRWIN, PA.—The Westmoreland Traction St. Ry. Co., of Irwin, was incorporated May 2, with $20,000 capital stock, to build an electric street railway. A. Frank, Pres.; and B. E. Humphreys, Irwin; and Frank L. Fry, Manor, Pa., are incorporators.

MAUCH CHUNK, PA.—The Carbon County Electric Ry. Co. has secured the right of way for an extension from the west end of this borough through the Bloomingdale Valley to Summit Hill, about 13 miles.

PITTSBURG, PA.—Cronin & O'Herron have begun work on the proposed 1,800-ft. tunnel to be built under Mount Washington for the Pittsburg Tunnel Co., which is intended to open up a direct route for electric lines coming into Pittsburg; estimated cost, $150,000. Jas. M. Bailey, Pres., Pres. of Fourth National Bank; W. A. Edeburn, Engr.

YEADON, PA.—The council has granted a franchise to the Midland St. Ry. Co. to build in this borough. Work must begin within four months. Jas. D. Laylor, Pres.

WASHINGTON, D. C.—The consolidation of all the lines in the District, with the exception of the Capital Traction Co., has finally been consummated. This insures the replacing of the horse cars on the Belt and Anacostia lines by the underground electric system.

RICHMOND, VA.—Bids are asked until May 16 for 42,000 cu. yds. of earth excavation, 43,000 cu. yds. of rock excavation and 22,000 cu. yds. of concrete masonry, etc., for the Virginia Electrical Ry. & Development Co., as stated in our advertising columns. Further information may be found under Electric Light and Power. E. L. Bermiss, Pres.; R. Shirreffs, Ch. Engr.; E. J. Miller, Steam and Electrical Engr., all of Richmond.

WHEELING, W. VA.—The People's Ry. Co. has been incorporated, with a capital stock of $500,000, to build in this city. Frank McNell, C. L. Hill and Gilmore Brown are incorporators.

CLEVELAND, O.—Application has been made to the council by B. Schatzinder, L. G. Kassulker, Charles A. Klump, Omar Stoppel and Louis Poplowsky for a franchise to construct and maintain an electric street railway running easterly with a double track to the city limits.

FREMONT, O.—S. F. Angus, Henry Haigh and J. S. Liggett, Detroit, Mich., has applied to the commissioners of Sandusky county for a franchise to build the proposed Toledo, Fremont & Norwalk Electric Ry.

MISHAWAKA, IND.—The Indiana Electric Ry. Co. has begun work at this place with 300 men on the construction of its proposed interurban line. A power house for the system is now under way at Osceola. Dewitt Dilworth, Pittsburg, Pa., and I. McM. Smith, Chicago, are incorporators.

CHICAGO, ILL.—An ordinance has been introduced in the council granting to the Chicago Western Elevated R. R. Co. the right to construct an elevated road from 123d St. to the northern city limits. H. D. Bean, Pres.

SYCAMORE, ILL.—The supervisors of De Kalb county have granted a franchise to the Geneva Lake, Sycamore & Southern Electric Ry. Co.

FOND DU LAC, WIS.—The Fond du Lac St. Ry. & Light Co. has been organized, capital stock, $100,000, to construct a street railway and electric light plant. T. F. Grover, Wm. E. Cole and Rolvin F. Allen are incorporators.

KANSAS CITY, MO.—The Kansas City, Bonner Springs & Topeka Ry. Co. has been incorporated to succeed the Kansas City, Bonner Springs & Forest Lake Ry. Co. It is proposed to build between Kansas City and Topeka. C. F. Hutchings, Kansas City, Kan., is a promoter.

BOULDER, COLO.—The Boulder Ry. & Utility Co. has been incorporated, with $250,000 capital stock, to build an electric railway system in this city, and to supply light, heat and power to neighboring mines. S. R. Thompson, E. C. Allen and W. C. Dyer are directors.

SEATTLE, WASH.—The Seattle-Tacoma Electric Ry. Co., which proposes to build from Seattle to Tacoma, has been reorganized, with headquarters at Seattle. John Collins, Pres., Seattle; Henry Bucey, Secy. and Gen. Mgr., Tacoma, Wash.——The trustees of the First Avenue Cable Co. are reported to have applied to the council, through Geo. E. Macomber, for a new 50-year franchise enabling the company to change its line from cable to an electric system; estimated cost, $65,000 to $100,000.

RIVERSIDE, CAL.—Bids are asked until May 23 for the purchase of a street railway franchise, as applied for by the Riverside & Arlington Ry. Co. C. R. Stibbens, Cy. Clk.

SALT LAKE CITY, UTAH.—The Salt Lake City R. R. Co. has applied to the council for a franchise to build two extensions to its system. W. P. Read, Supt.

WOLVERHAMPTON, ENGLAND.—Bids are asked by the tramway committee of the Corporation of Wolverhampton until May 31 for 3,100 tons of steel girder rails, for 12,000 tons of granite setts and 915,000 creosoted deal paving blocks. J. W. Bradley, Borough Engr.

GOTHENBURG, SWEDEN.—Consul Bergh, Gothenburg, reports that the city council has decided to purchase the franchise and stock of the Gothenburg Tramway Co. for $340,655. It has not yet been decided whether the city will build and manage the line itself, or lease the franchise to a company.

ELECTRIC LIGHT AND POWER.

LIVERMORE FALLS, ME.—John H. Maxwell, Treas. Livermore Falls Light & Power Co., writes us that the proposed water power plant will cost $10,000. Light and power will be furnished to manufacturing plants, etc.

MALDEN, MASS.—The Malden Electric Co. has made a contract with the city to furnish electric lighting for three years at $29,000 a year.

NEEDHAM, MASS.—The Greendale Chemical & Electric Lighting Co. has been awarded the contract for extending the electric plant, according to reports.

ROCKPORT, MASS.—The question of the municipal ownership of the plant is being considered.

NEWPORT, R. I.—The Newport Illuminating & St. Ry. Co. has been sold, it is reported, to the Shaw-Morgan syndicate, which controls practically all the electric roads in this section of New England. They will be run in connection with the Fall River road. The Newport Illuminating Co.'s stock is principally held by cottagers, the largest holders being H. O. Havemeyer, Jr., Cornelius Vanderbilt, Fred W. Vanderbilt and others.

ALEXANDRIA BAY, N. Y.—This place is reported to have appropriated $1,500 for electric lights.

FALCONER, N. Y.—Gerald E. Mix, Dunkirk, N. Y., and H. F. King, Corry, Pa., have been granted a franchise for a plant here. The plant is to be in operation in less than six months.

GLENS FALLS, N. Y.—J. R. McKee, of the General Electric Co., Schenectady, N. Y., is reported to have inspected the water power site at Upper Falls, with a view of the company developing it. Elmer J. West, of the Kanes Falls Electric Co., is interested.

THERESA, N. Y.—B. B. Taggert and Chas. H. Remington, Watertown, N. Y., and Dr. J. E. Liddy, Clayton, N. Y., are reported as interested in a proposed water power plant on Indian River between Bonaparte Lake and Theresa.

WATERTOWN, N. Y.—The St. Regis Paper Co. has let the contract for constructing its hydraulic canal to Belden & Seely, Syracuse, N. Y. The bids, which were rejected, were published in our issue of April 20.

WATERVILLE, N. Y.—Mr. Sweet, of Utica, N. Y., has submitted a proposition to the village to furnish 33 arc lights for $2,000 a year. H. R. Thomas, Pres. Village.

CAMDEN, N. J.—The General Electric Co. of America has absorbed the plant and franchises of the Camden Lighting & Heating Co., the only electric company in the city. Judge E. A. Armstrong, the president, is succeeded by A. Louden Snowden. The Camden company has been in existence since 1889, and has recently constructed a new plant. It has a five-year contract to light the city.

HOLLY BEACH, N. J.—Jas. C. Blackwood, Front and Arch Sts., Camden, N. J., will sell at private sale, at one-half its original cost, the plant and franchises of the Seacoast Electric Light Co., situated between and supplying light for Holly Beach and Wildwood, Cape May county. The plant was erected in 1897.

WESTFIELD, N. J.—The electric light plant committee, consisting of J. S. Irving, Geo. H. Embree, Wm. S. Welch and J. T. Pierson, wants information on electric plants.

DANVILLE, PA.—This place, it is reported, has voted to issue $15,000 in bonds for a plant.

HARRISBURG, PA.—Bids are asked until May 8 for lighting the streets and avenues with electric lights for one, three or five years, beginning June 1. M. H. Craiglow, Pres. Select Council.

McKEESPORT, PA.—The matter of erecting a plant to cost about $25,000 is being urged.

WILKES-BARRE, PA.—Hessel, Lewis & Co., Wilkes-Barre, have been awarded the contract, at $10,956, for furnishing the equipment and for erecting a plant at the new asylum building at Retreat. Other bidders were: Shepherd & Rust, Wilkes-Barre, $11,142; C. B. Scott, Scranton, $10,980; Hunt & Connell, Scranton, $12,540; D'Olieg Engineering Co., Philadelphia, $10,994. McCormick & French, Archs., Laurie Bldg., Wilkes-Barre.

SALISBURY, N. C.—J. G. White & Co., 29 Broadway, New York, and Equitable Bldg., Baltimore, Md., are reported as about to begin the construction of the proposed power plant on the Yadkin River, in Stanley county. The plant is to develop 40,000-HP., and is to be operated by the North Carolina Power Co. Capital stock, $5,000,000. It is also proposed to issue $2,500,000 in bonds. E. B. C. Hambley, Pres., Salisbury; Dr. Dillon Brown, Treas.

RICHMOND, VA.—Bids are asked by the Virginia Electrical Ry. & Development Co. until May 16 for excavation and masonry work for a dam, as described in our advertising columns. We are informed that the work in which the company is engaged is the development of the water power of the James River at the site of the old Haxall-Crenshaw mills in Richmond. B & W. boilers (2,000-HP.) have been contracted for. Engines, turbine wheels and generators will be bought very soon. E. L. Bemiss, Pres.; R. Shirreffs, Ch. Engr.

SCHUYLER, VA.—J. W. Foster, Mgr., Virginia Soapstone Co., writes us that the company wants machinery for 150 to 200 HP. for lighting and a trolley line. The plant will be operated by water power.

WHEELING, W. VA.—The Consumers Electrical Co., it is reported, will soon ask for bids for building a plant to cost about $100,000. S. W. Harper, Pres.

ASHEVILLE, N. C.—It is proposed to build a plant at Ellis Rapids, French Broad River, this place, to furnish light and power to Asheville and manufacturing plants. Chas. A. Reynolds and M. B. Ellis, tobacco manufacturer, Winston, N. C., are interested.

CULLMAN, ALA.—Bids are asked until May 22 for furnishing the materials and for constructing a plant and water-works, to cost $25,000. J. F. Beyer, Mayor; W. H. Jones, Cy. Clk.

LEXINGTON, KY.—Local papers state that the Lexington Ry. Co.'s plant and property will be sold to a syndicate. The property of this company includes the Belt Electric Ry., the Central Electric Light Plant and the Hercules Ice Plant.

KENT, O.—Bids are asked until 12 noon, May 6, for furnishing electric light, heat and power. Fred Bechtel, Clk.

MONTPELIER, IND.—The questions of the municipal ownership of the plant and water-works are reported as being considered.

GRAND RAPIDS, MICH.—Local papers state that a number of the mill and factory owners of this city propose to build a new power plant to cost about $200,000. An engineer is to be engaged at once to submit a report and estimates for such a plant. Messrs. Rowe and Berkey, of the east side, and Messrs. Voigt and Spooner, of the west side, are interested.

LUDINGTON, MICH.—The legislature has passed a measure exempting the city from one of the charter provisions relative to raising money for the purpose of buying or building a plant and water-works, and authorizing the city, upon the favorable action of a majority of the taxpaying electors, to issue bonds to the amount of $115,000 for a plant and water-works purposes. The passage of this measure is the first step toward municipal ownership of light and water franchises.

ANNA, ILL.—This place is reported to have voted against issuing bonds for a plant.

CHICAGO, ILL.—Bids are asked until 11 a. m., May 4, for furnishing 680 telegraph poles; 50 miles No. 6 hard drawn, triple braid electric light wire; 50 miles No. 10 hard drawn copper wire; 5,000 1¼-in. locust pins; 5,000 deep grooved, double petticoat glass insulators; 5,000 galvanized iron pole steps ⅝ × 9 ins.; 500 butt guards; 2,000 galvanized iron protection strips. E. B. Ellicott, Cy. Electrician.

GRAYVILLE, ILL.—This place has voted to purchase the plant and water-works for $26,500. J. J. Catlett, Mayor; T. F. Hoover, Clk.

MOUNT PLEASANT, MICH.—The Isabella Electric Co. has been granted a franchise for a plant. The plant is to be in operation by Dec. 1.

SPRINGFIELD, ILL.—The legislature has voted to appropriate $20,000 for a plant for the state house and executive mansion.

LAKEFIELD, MINN.—S. R. Dubetz, Recdr., writes us that no bonds for a plant are likely to be voted for until next year.

MINNEAPOLIS, MINN.—Chas. R. Aldrich, Arch., is reported to have prepared plans for a plant at the state farm to cost about $10,000.

PRINCETON, MINN.—This place, it is reported, is to have a plant and water-works.

ASOTIN, WASH.—E. H. Libby and P. R. Kesley and others, representing Eastern capitalists, have been examining the water power. It is proposed to put in a power plant at Asotin, to cost about $200,000, taking the water from the Lewiston Water Power Co.'s flume, according to reports.

BENICIA, CAL.—A franchise has been granted to the Clear Lake Electric Power Co., the right to erect and operate in the streets, alleys and public highways of Benicia, poles, wires, etc., for the transmission of electricity for electric light and power purposes. H. K. White, Cy. Clk.

LOS ANGELES, CAL.—Local papers state that it is proposed to ask for bids for lighting the streets with electricity from Jan. 1, 1900.

HAVANA, CUBA.—Dubois & Boulanger have been awarded the contract for constructing a plant to cost about $800,000, according to reports.

LONDON, ENG.—Bids are asked until June 7 for furnishing the materials for a plant for the vestry of St. Mary, Battersea. Address W. M. Wilkens, Vestry Clk., Municipal Bldg., Lavender Hill, S. W., or Prof. Alex. B. W. Kennedy, 17 Victoria St., Westminster, London.

CAPE TOWN, SOUTH AFRICA.—Press reports state that Bull & Sinclair, contractors, at Cape Town, have secured a number of electric lighting contracts, for which they will require considerable material and machinery. It is reported that their electrical manager, Mr. Morton, is asking for quotations.

NEW COMPANIES.—Universal Conduit Light, Heat & Power Co., Wilmington, Del.; $150,000.

Ocmulgee Electric Light, Water & Power Co., Macon, Ga.; $50,000; to build a plant on the Ocmulgee River, eight miles above Macon; Robt. E. Park, I. B. English.

Hattiesburg Electric Light & Mfg. Co., Hattiesburg, Miss.; $50,000; W. W. Bostwick, Wm. Dunbar.

East River Electric Co., Bluefield, W. Va.; $15,000; for the manufacture of electrical dynamos; W. A. Cather, Edwin Mann, W. P. Hawley.

Blackstone Electric Co., Blackstone, Va.; $3,000; J. M. Harris, Geo. P. Adams, L. C. Tucker.

Universal Conduit Light, Heat & Power Co., Wilmington, Del.; $150,000; Edmund Mitchell, Jr., Jos. N. Harman, Saml. J. White, Wilmington.

Electric Light & Power Co., Hartsville, S. C.; $2,000; James L. Coker, Jr., J. J. Lawton.

Newton County Electric Light & Power Co., Covington, Ga.; $30,000; W. C. Clark.

Youghiogheny Light, Heat & Power Co., Connellsville, Pa.; $15,000, with $1,500 paid in; Robt. W. Saisson, Geo. J. Humbert, S. R. Slaymaker.

Portland Light & Power Co., Portland, Me.; $100,000; Henry P. Cox, Lyman N. Cousers, Seth L. Larrabee.

United Power & Transportation Co., Philadelphia, Pa.; $12,500,000; John A. Rigg, Pres.; R. N. Carson, Vice-Pres.; E. J. Moore, Secy. and Treas.

Edison Co., Newark, N.J.; $25,000; Albert O. Petit, Arthur P. Petit, Ademar N. Petit.

New York Gas & Electric Light, Heat & Power Co., New York; $36,000,000; Anthony N. Brady, Pres.; Frank D. Allen, Treas.; Henry J. Hemmens, Secy.

Harrison Light & Power Co., 227 Market St., Camden, N. J.; $50,000; Paul T. Shinn, Camden, N. J.; Henry J. West, Harry Reeves, Gloucester City, N. J.

Essex-Union Water & Light Co., Summit, N. J.; $500,000, with $100,000 paid in; to supply electricity, water, steam, compressed air, ice, coal and gas; Carroll Ph. Bassett, Civil Engr.; Frederick Green, Summit; Frederick R. Drake, Easton, Pa.

Kanawha Power Co., Charleston, W. Va.; $100,000, with $25,000 paid in; generating and selling power; Henry A. Gardner, James P. Gardner, Robert Ryan, Chicago.

Universal Conduit Light, Heat & Power Co., Wilmington, Del.; $150,000.

Hope Electric Light Co., Hope, N. Dak.; $2,500.

Tucker Mfg. Co., York, Pa.; $5,000; to manufacture telephones and telephone supplies; electrical and mechanical specialties; Chas. E. Tucker, Pres.; Eli Deardorf.

West Side Electric Light, Heat & Power Co., Scranton, Pa.; $20,000, with $2,000 paid in; Fred. Wamke, 1116 Washburn St.; M. F. Sands, Chas. A. Goos.

BRIDGES.

BOSTON, MASS.—Bids are asked until May 10 for building bridges on Sumner St. extension over A and C Sts.; deposit, $1,000. William Jackson, Cy. Engr.

CAMBRIDGE, MASS.—The Cambridge bridge commission has received the following bids for a temporary pile bridge over the Charles River: W. H. Ellis & Co., $24,500; W. L. Miller, $27,945; Benj. Young, $23,202; W. J. Lawler, Charlestown (accepted), $20,199.

CHICOPEE, MASS.—It is reported that the Edgemore Bridge Co., Wilmington, Del., has been awarded the contract for supplying and erecting certain steel bridges.

BAINBRIDGE, N. Y.—The Groton Bridge & Mfg. Co., Groton, N. Y., has been awarded the contract at about $20,000 for the building of the new bridge over the Susquehanna River at Bainbridge, according to reports.

BINGHAMTON, N. Y.—Bids are asked until May 9 for the erection of the substructure and superstructure of a bridge across the Susquehanna River at foot of Tompkins St. S. D. Kane, Cy. Clk.

BUFFALO, N. Y.—A bill has been passed by the legislature to appropriate $18,000 for a bridge over Black Rock Harbor.

ROCHESTER, N. Y.—The N. Y. C. & H. R. R. R. Co. proposes to reconstruct the bridges at Hill and North Sts. Address Assistant Engineer Ryan.

SANDY HILL, N. Y.—Manty, Higley & Co. have submitted the lowest bid to the state board of public works at $5,600, for a steel bridge over the canal.

SYRACUSE, N. Y.—City Engineer Stuart is about to submit plans for the construction of a $10,000 steel girder bridge over Onondaga Creek at Rich St.

LANCASTER, PA.—John B. Eshleman, David E. Mayer, and Jacob R. Rutter, County Comrs., have viewed the site of the proposed new bridge over the Pequea Creek, between Conestoga and Martic townships.

NORRISTOWN, PA.—Bids are asked by the county commissioners until May 17 for the construction of an iron bridge over Saw Mill Run, at Airy St.

PITTSBURG, PA.—The McConway & Torley Co. will construct a foot bridge over the railway at 48th St.

POTTSVILLE, PA.—A petition will be presented to the council to construct an overhead bridge on East Race St.

WASHINGTON, D. C.—Bids are asked by the district commissioners until May 27 for constructing a bridge across Piney Branch in Rock Creek Park, as stated in our advertising columns.

CUMBERLAND, MD.—Reports state that the West Virginia Central & Pittsburg Ry. Co., and the Baltimore & Ohio R. R. Co. have completed surveys for a bridge over the Potomac River between the South Cumberland yards and Ridgely, W. Va.

CLEVELAND, TENN.—H. M. Brady is reported to have been awarded the contract to build a steel bridge across Mouse Creek.

SPRINGFIELD, O.—Bids are asked until May 16 for the purchase of $3,000 of 5% bridge bonds. P. Huonker, Cy. Clk.

INDIANAPOLIS, IND.—Superintendent of Parks Power is about to prepare the plans for a stone bridge over Fall Creek, at Meridian St., to cost about $50,000.

INDIANAPOLIS, IND.—Reports state that the following bids have been received for building an iron bridge over Little Eagle Creek; but as they are too high, will probably be rejected: Bracket Bridge Co., $1,815; Lafayette Bridge Co., $1,780; New Columbus Bridge Co., $1,812; Indianapolis Bridge & Iron Works, $1,875.

BAY CITY, MICH.—The bridge commissioner has received the following bids for a new span for the bridge over the west channel of the river at Cass Ave.: W. C. Grisdale, duplicating the present swing with wood, $1,800; Youngstown Bridge Co., Youngstown, O., steel bridge, $7,882; King Bridge Co., Cleveland, O., new iron bridge, $6,300, without lumber; proposition to erect a draw span now at Lorain, O., for $3,850; for shortening it to 200 ft., $200 extra; all lumber to be furnished and the old swing torn down.

HOUGHTON, MICH.—T. Appleton, Ch. Engr., Copper Range R. R., Houghton, informs us that a contract has been awarded to the Phoenix Bridge Co., Phoenixville, Pa., for steel truss bridges on the new line, 41 miles long, from Houghton to Rockland.

CHICAGO, ILL.—The sanitary board has received the lowest bid for a bascule highway bridge at Taylor St., from the Chicago Bridge & Iron Co., at $71,040, and for a railway bridge from the Pennsylvania Steel Co., Steelton, Pa., at $297,384.——An ordinance has been passed by the council to remove the Taylor St. center pier bridge to Throop St.: appropriation, $10,000.

ST. PAUL, MINN.—It is reported that the chief engineer of the Great Northern Ry. has prepared plans for 35 bridges on western branches, to cost about $1,000,000.

DAVENPORT, IA.—The county supervisors are about to let the contract for an iron bridge across the Wapsipinicon River, near McCausland.

ABERDEEN, S. DAK.—Bids are asked until May 24 for five steel bridges, according to reports. Chas. Eggabroad, County Audr.

GLENDIVE, MONT.—James McCormick, Glendive, informs us that no steps have been taken to replace the county bridge over the Yellowstone River, which was wrecked April 9.

WALLA WALLA, WASH.—Bids are asked until May 20 for the erection of a steel girder bridge for 4th St. crossing in Mill Creek; deposit, $500. R. P. Reynolds, Cy. Clk.

MODESTO, CAL.—Reports state that on May 10 the board of supervisors will meet to discuss the erection of a bridge over the San Joaquin River.

WATSONVILLE, CAL.—The supervisors on April 25 received the following bids for the construction of a bridge at Aptos: A. McMahon, all steel, $3,789; less for wooden approach, $400; Nelson Mosher, $3,276 (accepted); all steel, $4,153; G. N. Simmons, $3,974, $3,500 and $3,310.

RANDOLPH, UTAH.—An election will be held May 22 to vote on the question of appropriating $2,500 for the construction of a bridge across Bear River. John Kennedy, Chn. County Bd.; M. McKinnon, County Clk.

SALT LAKE CITY, UTAH.—The council has instructed City Engineer Kelsey to rebuild the bridge over the Jordan at North Ninth St., at a cost of $1,800.

CORNWALL, ONT.—The Union Bridge Co., of Philadelphia, is said to have secured the contract for rebuilding the Ottawa & New York International Bridge over the South Channel of the St. Lawrence River.

BUILDINGS.

HALLOWELL, ME.—Plans are being received for an extension to building No. 1 of the State Industrial School at this place. J. W. Church, Chn.

BOSTON, MASS.—The Massachusetts Horticultural Society has voted to erect a new horticultural hall at Massachusetts and Huntington Ave. Francis H. Appleton, Pres.——Lynch & Woodward have been awarded the contract for the installation of a heating and ventilating apparatus in the East Boston high school building, at $19,700.

VINEYARD HAVEN, MASS.—Bids are asked until May 4 to prepare room for disinfecting plant for the Marine Hospital Service, at this place. W. J. S. Stewart, Passed Asst. Surgeon, Vineyard Haven.

STONINGTON, CONN.—Plans have been completed, according to reports, for a new library building for the Stonington Free Library Association, to cost about $25,000. F. B. Noyes, Trustee; Clinton & Russell, Archs., 32 Nassau St., New York.

ALBANY, N. Y.—The Albany Ry. Co. has decided to erect a new 2-story fireproof office building at Broadway and Columbia St., to cost about $50,000. Marcus T. Reynolds, Arch.

NEW YORK, N. Y.—Bids are asked by the department of charities, foot of East 26th St., until May 8, for the erection of a building to be known as "Pavilion F," on Randall's Island; also for building three ambulances for Bellevue Hospital and dependencies. ——It is reported that a number of architects will be asked to submit plans for the new custom house building to be erected in New York.——A new 10-story fireproof hospital building will soon be erected at 2d Ave. and 17th and 18th Sts., for the Society of the Lying-in Hospital of the City of New York. ——The Mercantile National Bank is reported to have bought the property at 198 Broadway with the intention of erecting a large office building.——Plans have been filed by Charles Lane, 243 East 38th St., for a 7-story brick flat and store building at 37th St. and Lexington Ave., to cost $75,000. H. S. Howell, Arch.; by S. & A. Stone, for four 5-story brick tenement buildings on 118th St., near 5th Ave., to cost $76,000. S. Sass, Arch., 23 Park Row; by Mary Schaefer, 640 Eagle Ave., for six 5-story brick flat and store buildings at St. Ann's Ave. and Rae St., to cost $115,000. Edward Wenz, Arch., 2377 3d Ave.; by R. H. Spaulding, 34 West 131st St., for a 6-story brick bachelor apartment building at 35 and 37 East 27th St., to cost $93,000. H. B. Mulliken, Arch., 289 4th Ave.; by Isaac Mayer, 59 West 115th St., for four 5-story brick flat and store buildings at 98th St. and Madison Ave., to cost $100,000. John Hauser, Arch., 1441 3d Ave.; by the Sisters of Mercy, 81st St. and Madison Ave., for a 4-story brick convent on 152d St., near Broadway, to cost $40,000. Neville & Bagge, Archs., 217 West 125th St.; by Wm. W. Graham, 1238 Madison Ave., for four 5-story brick dwellings on 95th St., near Madison Ave., to cost $100,000. Thomas Graham, Arch.; by John Walker, 171 Broadway, for an 8-story brick warehouse at 36 and 38 East 20th St., to cost $212,000. Franklin Bavlies, Arch.; by the Sailors' Snug Harbor, 31 Nassau St., for a 6-story brick store and loft building at 297 to 303 Mercer St., to cost $128,000. Robert Maynicke, Arch., 725 Broadway; by Peter Dooley, for a 6-story brick warehouse at 31 and 33 West 15th St., to cost $130,000. Cleverdon & Putzel, Archs., 41 Union Square; by J. C. Lyons, 67 East 127th St., for a 7-story brick flat building on Park Ave., near 81st St., to cost $75,000. Cleverdon & Putzel, Archs.; by T. G. O'Connell, 536 West 131st St., for a 3-story brick dwelling at 131st St. and Broadway, to cost $80,000. W. C. Dickerson, Arch.; by S. C. Judson, 530 West 187th St., for a 7-story brick flat and store building on Broadway, near 108th St., to cost $80,000. Clarence True, Arch.

NEW YORK, N. Y.—J. McA. Vance, Pittsfield, Mass., has been selected as architect for the new 6-story building for the Woman's Hospital at 49th and 50th Sts. and Lexington Ave.; estimated cost, $500,000.——It is reported that plans are being prepared by Little & O'Conner, 29 West 34th St., for a 4-story brick and stone school building for the College of St. Francis Xavier, at 126 West 17th St., to cost $100,000. Jas. D. Murphy, Contractor, 1181 Broadway.——Plans have been filed by Eliza White, Litchfield, Conn., for a 10-story brick hotel building at 512 to 520 7th Ave., to cost $300,000. Barney & Chapman, Archs., 1280 Broadway; by J. T. & J. A. Farley for six 5-story brick flat and store buildings on West End Ave., near 69th St., to cost $150,000. Thom & Wilson, Archs.

ONEIDA, N. Y.—Bids are asked until May 6 for rebuilding the Cherry St. school building. J. M. Goldstein, Oneida; Chas. E. Colton, Arch., Syracuse, N. Y.

ORIENT (L. I.), N. Y.—Bids are asked until May 18 for the construction of hospital, hospital steward's quarters and for heating the hospital at Plum Island (Orient P. O.), N. Y. Geo. A. Nugent, Q.-M., Fort Trumbull, Conn.

BLACKWOOD, N. J.—William Sevrons, Camden, N. J., was the lowest bidder, April 25, for the erection of an addition to the Camden county insane asylum at Blackwood, at $40,374; B. F. Sweeten & Son, Camden, were the next lowest, at $40,457. The following bids were received for the heating apparatus: C. F. West, Gloucester, N. J., $5,797; Robert Scott & Co., Philadelphia, $6,848; David R. Burns, Philadelphia, $7,398; Anderson & Adams, Philadelphia, $6,343; E. Keeler & Co., Philadelphia, $7,893.

PHILADELPHIA, PA.—A permit has been granted to George L. Sipps, Contractor, for the erection of a 6-story store and factory building at 707 and 709 Arch St., for Henry C. Lea, to cost $75,000.——Bids are being received by Doyle & Doak, contractors, 1507 Sansom St., according to reports, for erecting a building for the Chinese Garden, at the Exposition grounds, at West Philadelphia. Keen & Mead, Archs., 1420 Chestnut St.

PITTSBURG, PA.—Plans have been completed for a 5-story fireproof hotel building to be erected by R. B. Mellon at Beatty and Commerce Sts., to cost about $80,000. Alden & Harlow, Archs.——Benz Bros., Pittsburg, have been awarded the contract for rebuilding the Brashear school building, 108 x 98 ft., at Sierra, Picnic and Primrose Sts., to cost about $60,000. C. M. Barthberger, Arch.

NEWCASTLE, PA.—The commissioners of Lawrence county have let the contract for erecting an addition to the county court house and the jail to Contractor Hays, Newcastle, at $26,715.

BALTIMORE, MD.—It is reported that J. Wilson Leakin has bought the site at Cathedral and Preston Sts., and that a new hotel building will be built thereon, to cost about $400,000.

FORT MEYER, VA.—Bids are asked until May 15 for constructing at Fort Meyer one barracks, one set commanding officers' quarters, one storehouse, plumbing, steam heating, etc. Maj. T. E. True, Depot Q.-M.

RALEIGH, N. C.—The following bids were received by the supervising architect, Washington, D. C., April 27, for a new low-pressure, return circulation, steam heating and ventilating apparatus for the U. S. building at Raleigh; time, 60 days:

E. Rutzler, New York	$5,008
Zellers & Co., Washington	4,486
John F. Dalton, Savannah, Ga	5,270
Gaylord & Eitapence, Binghamton, N. Y	4,273
Peter Schmahl, Savannah, Ga	5,400
Chafer & Becker, Cleveland, O	5,250
Young & Hughes, Raleigh	4,850

GAFFNEY, S. C.—Bids are asked until May 4 for erecting a 2-story brick fireproof jail and jailor's residence. N. Lipscomb, County Supervisor.

MARION, S. C.—J. H. Dingle, Cy. Surveyor, informs us that bids are asked until May 5 for erecting a fireproof county building for Marion county.

ATLANTA, GA.—Plans are being prepared, according to reports, for the reconstruction of the Kimball House, to cost about $75,000. W. T. Downing, Arch.

OGLETHORPE, GA.—Bids are asked until June 15 for erecting a 2-story brick jail building for Macon county. J. D. Frederick, Chn. County Comrs.

MONTGOMERY, ALA.—Competitive plans are asked until May 20 for two 8-room brick school buildings to be erected in this city, to cost from $18,000 to $20,000. J. M. Kennedy, Chn. Com. of Pub. Wks.

CLEVELAND, O.—Bids are asked until May 20 for erecting a new high school building at Decker and Genesee Aves. H. Q. Sargent, School Director.

ELWOOD, IND.—Bids are asked until May 15 for the erection of a new city building. Jas. J. Davis, Cy. Clk.; J. F. Alexander & Sons, Archs., Lafayette, Ind.

INDIANAPOLIS, IND.—Bids are asked until May 8 for erecting a 3-story brick addition, 175 x 56 ft., at the Southern Indiana Hospital for the Insane. G. C. Mason, Supt.; Harris & Shopbell, Archs., Evansville, Ind.

DETROIT, MICH.—Malcomson & Higginbotham have been retained to prepare plans for the completion of the Western high school building and the proposed 8-room school building on Kercheval Ave., etc.——Bids are also asked by the secretary of the board of education for twelve new boilers.

STURGIS, MICH.—The Hotel Thornton was damaged by fire, April 29; estimated loss, $75,000.

CHICAGO, ILL.—Bids are asked until May 25 for the construction (except heating apparatus and laundry machinery) of the boiler house, isolation ward, etc., for the U. S. Marine Hospital at Chicago, as stated in our advertising columns. J. K. Taylor, Supv. Arch., Washington.

DES MOINES, IA.—Garthwait & Co., Chicago, have been awarded the contract for erecting a new building for the Home for the Aged, at $29,016.

JAMAICA, IA.—Bids are asked until May 22 for erecting a 4-room school building. A. G. Edmand, Secy., Jamaica; W. R. Parsons & Sons Co., Archs., Des Moines, Ia.

RUSSELL, IA.—Bids are asked until May 20 for erecting a 6-room brick school building in this town. J. F. Sprague, Pres.; W. R. Parsons & Sons Co., Archs., Des Moines, Ia.

FRANKLIN, MINN.—Bids are asked until May 15 for erecting a public school building. E. S. Johnson, Clk.; A. J. Hedlund, Arch., Olivia, Minn.

MINNEAPOLIS, MINN.—Plans are being prepared for a new freight terminal at station on 2d St., near 5th Ave., for the Minneapolis, St. Paul & Sault Ste. Marie Ry.; estimated cost, $50,000.——We are informed that J. & W. A. Elliott have been awarded the contract for erecting the 5th Precinct police station, at $1,296. The Archambo Heating Co. received the contract for the plumbing and gas-fitting, at $144.

ST. PAUL, MINN.—The following bids were received by the supervising architect, Washington, D. C., May 1, for the interior finish, plumbing and gas piping at the U. S. building at St. Paul:

		Time.
Angus McLeod & Co., Minneapolis	$148,737	12 mos.
L. L. Leach & Sons, Chicago	152,000	12 "
E. F. Gobel & Co., Chicago	198,556	12 "
Hennessey & Cox, St. Paul	154,000	12 "
Jno. A. Sirges, St. Paul	164,928	10 "
Butler-Ryan Co., St. Paul	146,950	10 "
The Barnett & Record Co., Minneapolis	157,213	10 "
Wm. H. Ellis, Cincinnati, O.	159,209	12 "

STILLWATER, MINN.—Bids are asked until May 16 for erecting a new county jail and kitchen at Stillwater, Washington county. Chas. H. Browne, County Audr.; Orff & Guilbert, Archs., Lumber Exchange, Minneapolis, Minn.

WEST SUPERIOR, WIS.—The Riter-Conley Mfg. Co., Pittsburg, Pa., has been awarded the contract for the steel superstructure of the West Superior grain elevator of the Great Northern Ry. Line, requiring about 2,000,000 lbs. of steel; estimated cost, $800,000.

WAKEFIELD, NEB.—Bids are asked until May 15 for erecting an 8-room brick school building. C. E. Hunter, Secy. Bd. of Education; J. C. Stitt, Arch., Norfolk, Neb.

CASTLEWOOD, S. DAK.—Bids are asked until May 6 for constructing a farmers' grain elevator complete, with a capacity of 20,000 bushels, for the Farmers' Elevator Co. of Castlewood. W. H. Bennett, Pres.

GRAND FORKS, N. DAK.—Bids are asked until May 24 for the erection of a dormitory at the State University. Joseph Kennedy, Secy. Bd. of Trustees.

ST. LOUIS, MO.—We are informed that the following bids were received April 25 for erecting a storage coal shed, lavatory and supply house for the water-works department, all local bidders. John Low, $30,540; Moritz Barwick Construction Co., $33,000; Hill-O'Meara Construction Co., $29,519; Lenz-Helm Building Co., $31,940; C. Stafford, $31,490; Geisel Construction Co., $32,375; Kerr & Allen, $29,425; R. W. Morrison Construction Co., $37,500.

WOLFPOINT, MONT.—The following bids were received by the Office of Indian Affairs, Washington, D. C., April 26, for constructing (a) two brick dormitories and (b) a water and sewer system at the Fort Peck Agency, Mont.: Owen & Hille, Lumber Exchange, Minneapolis, Minn., (a) $29,990; (b) $9,960; Edward Wagner, Helena, Mont., (a) $22,793; (b) $11,222.

GUTHRIE, OKLA.—It is announced that a gift of $25,000 has been made to the Oklahoma Congregation College for the erection of a boy's dormitory building. J. T. House, Pres.

ARKANSAS CITY, KAN.—Bids are asked by the Office of Indian Affairs, Washington, D. C., until May 23, for the construction of a stone dormitory at the Chilocco Indian School, Okla. C. W. Goodman, Supt., Arkansas City.

BREMERTON, WASH.—Bids are asked until June 10 for the construction of a steam engineering and boiler house at the Puget Sound naval station, Bremerton. M. T. Endicott, Ch. of Bureau of Yards and Docks, Washington, D. C.

FORT STEILACOOM, WASH.—Bids are asked until May 24 for erecting a new wing at the Western Washington Hospital for the Insane at this place; bond, $20,000. Address Ernest Lester, Secy. State Bd. of Audit and Control, Tacoma, Wash.

FRIDAY HARBOR, WASH.—Bids are asked until May 10 for constructing a school building for district No. 27, San Juan county.

ORTING, WASH.—Bids are asked until May 24 for erecting a dormitory and amusement hall combined, at the Washington Soldiers' Home, near Orting; bond, $2,000. E. Lester, Secy. Bd. of Audit, Tacoma.

PUYALLUP, WASH.—Bids are asked by the Office of Indian Affairs, Washington, D. C., until May 25, for constructing at the Puyallup Agency one frame dormitory, mess hall, laundry, etc., and water and sewer system. J. C. Hart, Supt., Tacoma, Wash.

LOS ANGELES, CAL.—Bids are asked until May 8 for erecting eight engine houses for the fire department. C. H. Hance, Cy. Clk.

YUBA CITY, CAL.—The court house of Sutter county was destroyed by fire April 21; loss, $30,000; insurance, $20,000.

FARMINGTON, UTAH.—Bids are asked by the trustees of district No. 13, Davis county, until May 18, for erecting a school building. E. H. Williams, Syracuse, Utah.

SANDY, UTAH.—Bids are asked until May 11 for erecting an additional building to the school building in district No. 41, at Sandy. J. A. Headlund, Arch., 418 Dooly Block, Salt Lake City, Utah.

LACHUTE, QUE.—Bids are asked until May 6 for erecting a new building for the Presbyterian Church. T. Christie, Jr., Secy. and Treas.

WATER-WORKS.

LEWISTON, ME.—E. H. Gowing, 95 Milk St., Boston, Mass., is reported as making surveys for improving the works. J. A. Jones, Cy. Engr.

HOLYOKE, MASS.—Local papers state that the water commissioners will begin preliminary work at once on the proposed new storage basin; estimated cost, $75,000.

WHITMAN, MASS.—The town has voted to accept the legislative act authorizing it to secure a new water supply from Silver Lake; estimated cost, $130,000. J. C. Gilbert, Chn. Water Comrs.

ATTICA, N. Y.—C. B. Benedict, it is reported, will build works here.

FULTON, N. Y.—The Fulton Water-Works Co. has refused to sell its works for $150,000. It is said that several members of the commission are in favor of paying the company $172,000, the price asked by the company. Another election to vote on the question will be held May 16. F. A. Gage and Geo. P. Wells are on the commission.

MALONE, N. Y.—The Gleason Water-Works Co. has been incorporated, with a capital stock of $1,000, by E. C. Gleason, W. C. Short and G. S. Harvard.

PEEKSKILL, N. Y.—W. H. Christon, Supt., writes us that the water department expects to contract with Fleischmann & Co. for erecting new works on the outer limits of the city.

SAVONA, N. Y.—The question of building works is being considered, according to reports.

ASBURY PARK, N. J.—The East Jersey Coast Water Co. has secured a franchise for supplying the borough of Bradley Beach with water by June 15.

COLUMBUS, N. J.—The Columbus Water Co. has been incorporated, with a capital stock of $6,000, by Chas. L. Carslake, Edward A. Atkinson and Amos Gibbs.

NEWARK, N. J.—Bids are asked until May 11 for furnishing cast-iron water pipe and special castings, as stated in our advertising columns. M. R. Sherrerd, Engr. and Supt. Water Dept.——The council has passed resolutions approving the contracts by the board of works for supplemental water supplies, made with Arthur J. Connelly, to be obtained from driven wells at Belleville, and from the East Jersey Water Co.

ALLENTOWN, PA.—Bids are asked by the water commissioners until May 29 for furnishing a 6,000,000-gallon pumping engine, as stated in our advertising columns.

CANNONSBURG, PA.—J. Woods Brown, agent for the Merchants' Insurance Co., Newark, N. J., wants to build new works here, according to reports.

CARLISLE, PA.—The Taxpayers' Water Co. has asked for a charter. Geo. Scott, Thos. J. Parmley, Edward Keane and others are interested.

MERCERSBURG, PA.—C. E. Boland, Scranton, and J. Woods Brown, Newark, N. J., it is stated, have applied for a franchise for works.

TITUSVILLE, PA.—The Snow Steam Pump Works, Buffalo, N. Y., is stated to have been awarded the contract for a new engine for the works, at $21,848.

WASHINGTON, D. C.—Bids are asked by the district commissioners until May 27 for furnishing cast-iron water pipe, as stated in our advertising columns.

WILLIAMSPORT, MD.—C. E. Boland, Scranton, Pa., and J. Woods Brown, of the Merchants' Insurance Co., Newark, N. J., are reported to have asked for a franchise for works.

BERRYVILLE, VA.—The question of building works is again being considered. T. S. Thompson, Recdr., writes us that the committee has been authorized to employ an engineer to furnish estimates and a report, after which the question of issuing bonds will be voted upon. Water will be furnished by gravity; source, 6 miles distant. Population, 1,800.

DAWSON, GA.—W. B. Cheatham, Mayor, writes us that the proposed works will cost about $25,000. The water will be secured from artesian wells. More information can be had in 30 to 90 days.

POINT PLEASANT, W. VA.—It is reported that this place wants works.

BIRMINGHAM, ALA.—The Birmingham Water-Works Co. proposes to furnish water to Pratt and Ensley. General Manager Milner of the water company may be addressed.

CULLMAN, ALA.—Bids are asked until May 22 for furnishing the materials and for constructing works and an electric plant, to cost about $25,000. (Postponement from May 1.) R. M. Newbold & Co., Engrs., Birmingham, Ala.; W. H. Jones, Cy. Clk.

HUNTSVILLE, ALA.—Bids are asked until May 22 for the purchase of $20,000 of 5% 30-year bonds for improving the works. S. S. Fletcher, Cy. Clk.

PADUCAH, KY.—Press reports state that the council is considering the question of building municipal works.

AKRON, O.—Mayor W. E. Young in his annual message has recommended the municipal ownership of the works.

CINCINNATI, O.—Chas. G. Roth, Clk. Water Comrs., writes us that undoubtedly Folz, Williard & Co., Cincinnati, submitted the lowest bid, at $1,069,232, for constructing new reservoirs. The other bids were as follows: Warner Water Supply Co., Dayton, O., $1,451,677; F. H. Kirscherer & Sons, $1,145,046; J. M. Quill, $1,434,785; Hughes Bros. & Bangs, Syracuse, N. Y., $1,237,570; M. Sullivan, $1,324,467; Mason & Hoge Co., Frankfort, Ky., $1,189,498; A. J. Henkel, $1,171,429; Guy M. Gest, $1,198,409.

EVANSVILLE, IND.—Mayor Akin has asked the water board to make a report on the question of a water filtration plant.

WEST BAY CITY, MICH.—The water commissioners have authorized the mayor to secure the services of an expert in regard to constructing new works, to cost about $140,000. Jno. Walsh may be addressed.

MANHATTAN, ILL.—This place is reported to have let contracts for building works. Fred. Eberhardt, Pres.

SULLIVAN, ILL.—F. M. Waggoner, Cy. Clk., writes us that nothing has yet been done towards securing a stand-pipe and sewerage. The new administration will probably submit the proposition to issue bonds to a vote of the people.

GALESVILLE, WIS.—The council is reported to have voted to contract with a Chicago firm for building works. After a certain number of years the works will become the property of the city.

POMEROY, IA.—The mayor writes us that the question of issuing bonds for works carried at the recent election. No arrangements have yet been made for the construction. Population, 1,000.

WATERLOO, IA.—H. C. Schultz, Cy. Clk., writes us that new filters for the works will be put in. A new water supply will be secured from Cedar River. Population, 12,000.

ST. JAMES, MINN.—Bids are asked by the city recorder until May 8 for constructing a deep well in this city.

EDGERTON, KAN.—Press reports state that plans have been made by the Atchison, Topeka & Santa Fe Ry. Co. for the construction of a reservoir at Edgerton, to hold 12,800,000 gallons. The plan is to use the reservoir in place of a tank. While it will likely be built some time this year, it is not yet definitely decided when the construction will be begun.

ENTERPRISE, KAN.—Bids are asked until May 10 for a new power house, machinery, well, stand-pipe, about a mile of new pipe, 10 new hydrants and six new gate valves. H. V. Hinckley, Engr., Topeka; Jas. Frey, Clk.

JOPLIN, MO.—The American Water-Works Co., it is reported, has purchased the works of the Joplin Water-Works Co.

ST. LOUIS, MO.—Bids are asked until June 27 for furnishing plans and for erecting two pumping engines at the high service pumping station No. 3. Robt. E. McMath, Pres. Bd. Pub. Improvements; E. S. Foster, Secy.

COLFAX, WASH.—Prof. W. J. Roberts, Civil Engr., Pullman, Wash., writes us that the present water supply of this place, though adequate, is not altogether acceptable. The council has authorized a test well drilled in a new location. If this proves successful an appropriation of $10,000 will be made for improvements.

DAVENPORT, WASH.—Prof. W. J. Roberts, Pullman, Wash., has prepared plans for works to cost $16,000. Population, 1,200. Source of supply, two springs flowing 750,000 gallons in 24 hours. Pumping machinery, stand-pipe, 10,000 ft. of 8, 6 and 4-in. pipe in the system. A proposition to bond the city will be submitted to a popular vote. The town has no debt and $3,000 cash in the treasury. Adam Knox, Mayor.

KETTLE FALLS, WASH.—Bids are asked until May 9 for constructing works. Payment will be made on 6% 10-year bonds. J. J. Fuller, Town Clk.

WENATCHEE, WASH.—An election will be held May 16 to vote on the question of issuing bonds for works.

PENDLETON, ORE.—Bids are asked until May 31 for improving the works, as described in our advertising columns. F. W. Vincent, Mayor; J. E. Beam, Recdr.

LAKEPORT, CAL.—Jas. Stanford, 518 15th St., Oakland, Cal., has been awarded the contract, at $15,591, for building works. In our issue of last week a typographical error made the above name Jas. Stanley.

SAN LUIS OBISPO, CAL.—We are informed that this place voted April 20 to issue $80,000 in bonds for works and $36,000 in bonds for a sewerage system. J. A. Goodrich, Cy. Clk.; Wm. Shipsey, Pres. Cy. Trustees.

LACHUTE, QUE.—It is proposed to purchase the works of the Laurentian Water & Power Co. Wm. Kennedy, Montreal, estimates the works to be worth $21,000.

BRACEBRIDGE, ONT.—This place has been authorized to issue $5,000 in bonds for extending the works.

HINTONBURG, ONT.—The following contracts for furnishing the materials and for constructing works were let April 24: A. McDonald, Aylmer, pipe trenching laying and refilling, $14,570; Montreal Pipe & Foundry Co., Montreal, 641 tons pipe, $17,627; 12 tons special castings, $564; St. Lawrence Foundry Co., Toronto, valves and hydrants, $1,944; W. J. Campbell, Ottawa, 120 ft. 12-in. steel pipe, $390; H. B. Merrill, New York, 2 pumping engines, $2,450; 2 boilers, $1,900.

OSHAWA, ONT.—Bids are asked until 8 p. m., May 5, for furnishing the materials and for constructing works and a sewerage system. Galt & Speakman, Engrs., Canada Life Bldg., Toronto, Ont.; C. French, Chn. Com.

NANAIMO, B. C.—It is proposed to build works and a sewerage system. S. Gough, Cy. Clk.

NELSON, B. C.—City Engineer McCullough is reported to have submitted a report for a steel pipe line to Cottonwood Creek for a new water supply; estimated cost, $20,000.

NEW WESTMINSTER, B. C.—The council proposes to borrow $15,000 for works. W. S. Norman, Spokane, Wash., has made a proposition to put in works, to cost about $25,000.

SEWERAGE.

WATERBURY, VT.—The question of building a system is reported as being considered.

QUINCY, MASS.—Bids are asked until May 15 for building about 10,000 ft. of pipe sewers, as stated in our advertising columns. E. W. Branch, Engr. Comrs.

DARBY, CONN.—Bids are asked until May 12 for constructing sewers, as described in our advertising columns. D. S. Brinsmade, Engr.; J. W. Larkin, Cy. Clk.

NEW HAVEN, CONN.—J. A. Doolittle & Co. have been awarded the contract for constructing a sewer in Anderson and Willow Sts., at $1,178.

COHOES, N. Y.—W. J. Elliot, Cy. Clk., writes us that the following bids were received April 26 for constructing 8¾ miles of sewers, as advertised in Engineering News:

R. H. Strong, Albany, N. Y.	$67,262
E. H. Post, Wilkes-Barre, Pa. (accepted)	46,363
Harrington & Besch, Troy, N. Y.	53,342
Cohoes Con. Co., Cohoes, N. Y.	54,963
A. M. Banker, Gloversville, N. Y.	48,381
J. H. Neary, Cohoes, N. Y.	54,596
F. S. Ablett, Cohoes, N. Y.	52,624
P. H. Harrison & Son, New York city	52,334
Baker & Judson, Gloversville, N. Y.	60,718
Chas. T. Hookway, Syracuse, N. Y.	53,687
Thos. Karr, Troy, N. Y.	76,410

JAMESTOWN, N. Y.—The council proposes to submit to the people the question of building a new system, to cost $60,000. Aldermen H. H. Rappole and Wm. Jones and Mayor Cooper may be addressed.

SARATOGA SPRINGS, N. Y.—The governor has signed the bill authorizing this city to build a system of sewage disposal, to cost about $75,000. L. H. Cramer, Pres. Village Bd.; Jno. Foley, Village Pres.

ALLEGHENY, PA.—Bids are asked until May 8 for constructing sewers in a number of streets. Robt. McAfee, Dir. Pub. Wks.

GETTYSBURG, PA.—J. C. Kendlehart, Secy. Town Council, writes us that the proposed sewer will likely be built by a company about to be organized. The work will be done by local labor.

NORRISTOWN, PA.—Bids are asked May 20 for furnishing 36 to 6-in. sewer pipe, etc., for the year ending March 1, 1900, as stated in our advertising columns. Jno. C. Shanks, Chn. Com.; S. C. Corson, Borough Engr.

SHERADEN, PA.—Plans for a system are reported to have been prepared.

WARREN, PA.—Bids are asked until May 15 for furnishing sewer pipe, brick, castings, etc., and for constructing sewers in certain streets. Levi Smith, Chn. Com.

BIRMINGHAM, ALA.—The council has passed resolutions for constructing storm sewers in certain streets, to cost $2,000. H. D. Wood, Cy. Clk.——Burkhalter & Co. have been awarded the contract for building sewers and paving in certain streets, at about $21,000.

CINCINNATI, O.—Jas. and Thos. Strack have been awarded the contract, at $72,459, for constructing the Bates and Stock Ave. trunk sewer in Camp Washington. The contract was first let to Peter N. Jonte, at $72,459, but he was unable, according to local papers, to secure the money to carry on the work. Messrs. Stracks decided to take the contract at Mr. Jonte's bid. The itemized bid of Mr. Jonte was given in our issue of March 16.

CLEVELAND, O.—The board of control will give a hearing May 5 on the question of building sewers in a number of streets. W. E. Sage, Secy.

DAYTON, O.—Bids are asked until May 8 for constructing lateral sewers in Grafton and Rockwood Aves. P. E. Gilbert, Pres. Bd. City Affairs.

DAYTON, O.—It is stated that the county commissioners have asked for bids for a system and filtering plant, to cost $5,500, for the county infirmary.

EAST CLEVELAND, O.—The City Wastes Disposal Co., 874 Broadway, New York, has been awarded the contract for a sewage disposal plant at East Cleveland, the first unit to have a capacity of 150,000 gallons a day, other units to be added from time to time as demanded by the increase of population, the ultimate plant to have a capacity of 3,000,000 gallons a day. As the effluent is to form practically the sole flow of an otherwise dry brook, which runs for several miles through the grounds of private residences, the purification is to be to a drinking water standard. The rate of purification is to be 600,000 gallons an acre a day. No chemicals are employed, the process being strictly that of bacterial oxidation, or virtually intensified land treatment, the sludge being consumed within the plant itself by the same bacterial agency. The plant is located in a residential district, and the surrounding grounds are to be laid out as a park.

MARYSVILLE, O.—This place has submitted plans for its proposed system to the state board of health.

MASSILLON, O.—City Engineer Borton has completed plans for sewers in West Tremont St. to cost about $5,000.

YOUNGSTOWN, O.—The state board of health is reported by local papers to have refused to approve the plans for a new system for this city. City Engineer Lillie and Dr. W. H. Buechner, of the local board of health, may be addressed.

FORT WAYNE, IND.—The board of health has had plans prepared for the South Wayne sewer.

INDIANAPOLIS, IND.—Robt. L. King has been awarded the contract for a sewer in Illinois St., at $13,321, and one in Polk St., at $1,670. Shover & Austin have been awarded the contract, at $19,704, for constructing the Fall Creek intercepting sewer.

ANN ARBOR, MICH.—Bids are asked until May 10 for constructing storm sewers, as described in our advertising columns. G. F. Key, Cy. Engr.; J. E. Harkins, Cy. Clk.

CHICAGO, ILL.—Alderman Carey, of the 29th Ward, is urging the construction of a new system to drain the western sections of the 29th and 30th wards.

MOLINE, ILL.—It has been decided to build a 6-ft. sewer extension from its present terminus at 13th St. to the outlet of tailrace at 3d St.; estimated cost, $15,000. Mayor Wessel may be addressed.

ST. PAUL, MINN.—The board of public works has asked for bids for constructing the Hamline system, to cost about $37,000.

LEAD, S. DAK.—Bids are asked until May 15 for constructing a main sewer, to include a tunnel 600 ft. long, according to reports. Mason Tyler, Cy. Audr.

ST. LOUIS, MO.—Bids are asked until May 16 for constructing about 21,500 ft. of 30- to 12-in. pipe sewers. Robt. E. McMath, Pres. Bd. Improvements.

SHERMAN, TEX.—The Sherman Sewerage Co. has been incorporated in New Jersey to construct and contract for sewage systems; capital stock, $475,000, and the amount paid in is $1,000. The incorporators are: S. Percy Edmund, Chas. F. Walker and Richard F. Loper, Philadelphia; G. W. Ruch, Pres. and Engr., 2851 Hutchinson Ave., Philadelphia.

LA JUNTA, COLO.—F. T. Lewis, Town Engr. and County Surv., writes us that the city will be ready for bids about May 20 for constructing 6,000 ft. of 8-in. pipe sewers, manholes, etc., laying sidewalks, curb, etc. G. S. Thompson, Town Clk.

COLFAX, WASH.—The new law passed by the legislature permitting the councils of cities in this state to construct sewers at the expense of property benefited, will enable Colfax to extend the sewers. Plans for 8,000 ft. of 8, 10 and 12-in. extensions are being prepared by W. J. Roberts, Pullman, Wash.

RED BLUFF, CAL.—An election will be held May 17 to vote on the question of issuing $35,000 of 4% 40-year bonds for a system.

SAN LUIS OBISPO, CAL.—We are informed that this place voted April 20 in favor of issuing $36,000 in bonds for sewers. J. A. Goodrich, Cy. Clk.; Wm. Shipsey, Pres. City Trustees.

SAN FRANCISCO, CAL.—The city officials have framed a resolution providing for the appointment of Marsden Manson, C. E. Grunsky and County Surveyor Tilton to make surveys for a complete system.

SAN RAFAEL, CAL.—An election will be held May 27 to vote on the question of forming a sanitary district in San Anselmo, Ross Valley and Tamalpais, and to issue $25,000 in bonds for the work.

WATSONVILLE, CAL.—The question of issuing bonds for a system will be voted upon in June, according to reports.

CHARLOTTETOWN, P. E. I.—Carvell Bros. have been awarded the contract for furnishing pipe, Portland cement and brick for the proposed system, bids for the construction of which will be opened May 6.

OSHAWA, ONT.—Bids are asked until 8 p. m., May 5, for constructing the system and water-works. Galt & Speakman, Engrs., Canada Life Bldg., Toronto, Ont.; C. French, Chn. Fire and Water Com.

MONTREAL, QUE.—It is proposed to extend sewers in four streets. P. W. St. George, Cy. Surv.

WINNIPEG, MAN.—It is proposed to construct sewers in five streets at a cost of about $16,200. C. J. Brown, Cy. Clk.

HAVANA, CUBA.—Press reports state that Gen. Wm. Ludlow, Military Gov., has been authorized to spend $335,000 for sewers, paving, etc.

GARBAGE DISPOSAL—STREET CLEANING

AUGUSTA, ME.—An order was passed at the last meeting of the council directing the committee to investigate and report on the purchase of a road scraper. L. D. Carver, Chn. Com.

BINGHAMTON, N. Y.—Bids are asked until May 26 for collecting and disposing of the garbage for one, three, five or ten years, as stated in our advertising columns. S. D. Kane, Cy. Clk.

UTICA, N. Y.—It is stated that the city clerk has asked for new bids for cleaning the paved streets, and also for collecting ashes, rubbish, etc.

WHEELING, W. VA.—A. L. White, Cy. Engr., writes us that the council has just awarded a 10-year contract to the United States Fertilizing Co., of this city, to dispose of city garbage. Brown & Hazlett, civil engineers, are preparing plans. The officers of the company are: C. A. Robinson, Pres.; C. E. Giffen, Secy.; George Hook, Treas.; R. K. Giffen, Mgr., all of Wheeling.

SAVANNAH, GA.—Bids are asked by Geo. M. Gadsden, Dir. Pub. Wks., for furnishing a garbage disposal plant, as stated in our advertising columns.

STREETS AND ROADS

AUGUSTA, ME.—The Maine Insane Hospital wants to purchase a rock crusher with a capacity of about 20 tons per hour. M. S. Campbell, Treas.

BOSTON, MASS.—Bids are asked by the Board of Harbor and Land Commissioners until May 11 for paving about 2,000 lin. ft. of street and for the construction of the necessary catchbasins and drains therein.

CAMBRIDGE, MASS.—The committee on roads and bridges is considering the advisability of asphalt paving in Harvard Square.

HAVERHILL, MASS.—The council has decided upon the purchase of a stone crusher.

MONTAGUE CITY, MASS.—The town has appropriated $2,000 for the purchase of a stone crusher.

TEMPLETON, MASS.—The state has appropriated $5,000 for a road from the Gardner line to Otter River.

MIDDLETOWN, CONN.—The city has authorized the expenditure of $11,000 for street work.

BROOKLYN, N. Y.—Bids are asked by the department of highways, 21 Park Row, New York, until May 13 for furnishing and delivering to the department of highways granite paving blocks to be distributed where required in certain yards. Jas. P. Keating, Comr. Highways.

BUFFALO, N. Y.—Bids are asked until May 10 for paving and repaving certain streets. R. G. Parsons, Secy. Bd. Pub. Wks.

GLOVERSVILLE, N. Y.—It is reported that the following bids for paving have been received: Troy Public Works Co., $36,740; Callanan Road & Improvement Co., $35,659; Albert M. Banker, $35,215; Baker & Judson, $35,065 (accepted).

JAMESTOWN, N. Y.—Bids are asked by the Board of Public Works until May 6 for furnishing the material and for constructing about 5,800 sq. yds. of brick paving and about 2,920 lin. ft. of curbing and 200 ft. curved curbing; deposit, $500.

NEW CITY, N. Y.—The Board of Supervisors has apportioned the following for street work: Orangetown, $3,300; Clarkstown, $1,950; Ramapo, $2,250; Haverstraw, $1,800; Stony Point, $1,700.

NORWICH, N. Y.—A petition has been presented to the trustees to have East Main St. paved with brick. Plans for the same have been prepared by H. C. Allen, Kirk Block, Syracuse. The distance is about 2,400 ft. It is likely that the work will be advertised soon.

ROCHESTER, N. Y.—The following are the lowest bidders for street work: Hudson Ave., macadam improvement, H. N. Cowles, $34,651; Brooks Ave., cement walks, Thomas Holahan, $1,226; Genesee St., cement walks, Thomas Holahan, $1,665; and Caledonia Ave., block stone pavement, Lauer & Hagaman, $28,698.

SCHENECTADY, N. Y.—Bids are asked by the Schenectady Locomotive Works until May 9 for grading, paving and curbing on two streets. The estimated quantity of work is 2,900 ft. of curbing and 4,600 sq. yds. of asphalt or brick paving. W. D. Ellis, Pres.

SYRACUSE, N. Y.—Reports state that resolutions have been adopted for paving portions of several streets with sandstone block.

ATLANTIC CITY, N. J.—It is reported that the council is considering the question of paving; estimated cost, about $100,000.

ROSELLE, N. J.—Bids are asked until May 19 for constructing 9,000 sq. yds. of 6-in. pavement with macadam, slag foundation, as stated in our advertising columns. H. C. Van Emburgh, Engr.-in-charge, Plainfield; G. A. Rawlins, Clk.

ASBURY PARK, N. J.—The county freeholders are considering the construction of a stone road from Red Bank to Shrewsbury.

LEBANON, PA.—We are informed that the councils are considering the matter of street paving and sewers, but that nothing definite has been decided.

PITTSBURG, PA.—Bids are asked until May 5 for the paving with asphalt or block stone of a number of streets, to cost about $250,000, and for the grading, paving and curbing, to cost about $150,000. E. M. Bigelow, Dir.

NEWPORT, KY.—The contract for constructing Maple Ave. with combined concrete curb and gutters, &c., has been awarded to T. C. Brown, at $1,559. W. L. Glazier, Cy. Engr.

AKRON, O.—Reports state that an ordinance has been adopted for the grading, curbing with stone and guttering and paving with brick a portion of Buckeye St.

CINCINNATI, O.—Bids are asked until May 9 for grading, setting curbs and paving with brick a portion of Zeltner St., and until May 26 for grading, excavating and paving with asphalt a portion of Spring Grove Ave. Sam'l Nieman, Pres. Bd. Cy. Affairs; Geo. H. Spellmire, Clk.—Bids are asked by the board of trustees of the new water-works until May 26 for grading, masonry draining and macadamizing a portion of the Columbia and New Richmond Turnpike, at the water-works site at California.

FINDLAY, O.—The question of paving Hancock St. with asphalt is being considered, according to reports.

HAMILTON, O.—The following estimates for paving Third St. were submitted by City Engineer Dillon: Brick with limestone curb and gutter, $15,532; with cement curb, $15,022; sheet asphalt, $19,722; with limestone curb and gutter; $18,802, cement; $18,102, brick; $18,417, no gutter; block asphalt, $22,817, limestone curb; $21,197, cement; $22,062, brick; $22,782, no gutter.

VAN WERT, O.—We are informed that the following bids have been received for paving 30,324 sq. yds. with asphalt:

Trinidad Lake Asphalt Co., New York	$34,202
Vulcanide Paving Co., Philadelphia	64,882
Barber Asphalt Paving Co., Detroit	65,375
Metropolitan Construction Co., New York	66,274

BEDFORD, IND.—Reports state that Voorhees & Co., Terra Haute, have been awarded a contract for brick paving at about $36,000.

ELWOOD, IND.—W. W. Hatch & Sons, Goshen, Ind., have been awarded the contract for the paving of 1,600 sq. yds. of North A St. J. J. Davis, Cy. Clk.

INDIANAPOLIS, IND.—Bids are asked by the Board of Public Works until May 10 for paving three streets with asphalt and seven sidewalks with cement.

LIBERTY, IND.—It is reported that John Clark, Elwood Johnson and Sam Hall have been appointed by the council as a committee to purchase a stone crusher.

FLINT, MICH.—Reports state that the council has voted to ask for bids for $25,000 worth of new paving.

KALAMAZOO, MICH.—The council is considering the question of spending $25,000 for paving.

CHICAGO, ILL.—Bids are asked until May 6 for furnishing material and constructing slag roadways on Milwaukee and Archer Aves. L. E. M'Gann, Comr. Pub. Wks.——Reports state that the following contracts for paving have been awarded: Armour Ave., macadam, A. M. Nutterson, $1,920; Addison St., macadam, James Bairstow & Bro., $549; Prairie Ave., macadam, James Conlon, $32,680; Michigan St., granite, James A. Sackler, $7,071.

MONMOUTH, ILL.—The town has voted to spend $4,000 in the construction of a hard road on South Eleventh St.

WATERTOWN, WIS.—Bids are asked until May 23 for 18,300 sq. yds. of brick paving, as described in our advertising columns. Harlow Pease, Chn. Bd. Pub. Wks.

MINNEAPOLIS, MINN.—Bids are asked until May 12 for the furnishing of artificial combined curb and gutter for this season, and also for brick paving on 6-in. concrete foundation on Royalston Ave. G. W. Sublette, Cy. Engr.

KANSAS CITY, MO.—Bids are asked until 11 a. m. May 6, for constructing plank, brick and granitoid sidewalks in 37 streets. Henry A. Wise, Cy. Engr.

ST. LOUIS, MO.—Bids are asked by the Board of Public Improvements until May 16 for grading, granitoid curbing, guttering and paving with brick on 28 streets.

PUEBLO, COLO.—Reports state that a petition for more paving has been presented.

WHATCOM, WASH.—Mayor E. E. Hardin writes us that the engineer's report of plan and estimated cost of asphalt pavement on Elk St., has been filed and the resolution of intention to so improve the street has been ordered prepared for consideration by the council.

ASTORIA, ORE.—Bids are asked until May 15 for clearing, grading and grubbing wagon road of about 6½ miles. A. Bergsvik, Chn. Necanicum Rd. Com.

SALT LAKE CITY, UTAH.—City Engineer Kelsey has been requested to submit an estimate of a slag pavement on South Temple St., to cost about $33,000.

LUNENBURG, N. S.—It is reported that the council is considering the purchase of a stone crusher.

GRANTON, ONT.—Reports state that the Biddulph council has discussed the question of purchasing a road machine.

NORWICH, ONT.—Bids are asked until May 15 for constructing about 4,800 sq. yds. of macadam and cobblestone pavement. A. J. Yeo, Chn. Com.

PARABELEM (PARA), BRAZIL.—Bids are asked until June 30 for the construction of two avenues. Address Brazilian Consulate General, 17 State St., New York.

MANUFACTURING PLANTS.

BURLINGTON, VT.—Reports state that the Queen City Cotton Co. will soon erect a new mill, to cost about $300,000.

ADAMS, MASS.—Reports state that the Berkshire Cotton Mfg. Co. has decided to increase its capital stock by $1,000,000, and to erect another mill of 100,000 spindles at the cost of about $1,500,000.

BUFFALO, N. Y.—Plans have been prepared for a 4-story factory building, 150 × 38 ft., to cost about $60,000, for the Cataract Optical Co. George W. Graves, Arch.

BELLEFONTE, PA.—Reports state that a large silk mill will be erected in this city, to cost about $50,000. M. B. Bitner, Arch., Williamsport, Pa.

JOHNSTOWN, PA.—Reports state that the Cambria Iron Co. is to erect a plant in this city, with three large furnaces, each having a capacity of about 500 tons.

PHILADELPHIA, PA.—William Steele & Son, 506 Walnut St., are asking bids on a 7-story factory building, 85 × 100 ft., to be erected at 12th and Cherry Sts.

PITTSBURG, PA.—Reports state that the Shiffler Bridge Co. is about to erect a new plant for the Union Steel Castings Co.

SCRANTON, PA.—Reports state that Klots Bros., 487 Broadway, New York, will erect a silk mill in this city at a cost of about $35,000.

SHARON, PA.—Plans have been completed for an addition to the Wilks rolling mill in this city.

WORTHINGTON, PA.—The Buffalo Woolen Mills at Worthington, owned by the Graff Bros., were destroyed by fire, May 2; estimated loss, $60,000.

WILMINGTON, DEL.—Reports state that a new plant will be built in this city for the Diamond Steel Co., of which Geo. W. Todd, Pres. of Diamond State Iron Co., is said to be interested.

NEWPORT NEWS, VA.—It is reported that a $1,500,000 abattoir will be erected for the Chesapeake & Ohio R. R.; the building will cost about $700,000. Jacob Heold, Arch., Philadelphia.

NORFOLK, VA.—Reports state that a factory is to be erected at Lambert's Point for the Norfolk Silk Co. The building will be of brick and will cost $40,000.

AMERICUS, GA.—Reports state that the Morse Cotton Compress Co. will erect a large compress in this city; estimated cost, $30,000.

WEST POINT, GA.—The stockholders of the Lanett Cotton Mills have voted to increase the capital stock from $500,000 to $1,000,000 and to construct a new mill. L. Lanier, Pres., West Point.

CASTALIA, O.—It is reported that the Castalia Portland Cement Co., Pittsburg, proposes to double the size of its plant by the erection of two large steel structures, to cost over $200,000.

CINCINNATI, O.—Reports state that a 6-story building, 38×80 ft., will be erected at 520 and 522 Main St. for Crawley & Johnston, machinists. Des Jardins & Hayward, Archs.

CHICAGO, ILL.—It is reported that A. G. Spalding & Bros. will erect a plant for the manufacture of sporting goods at West Harvey; estimated cost of buildings, $250,000.

SALINA, KAN.—It is reported that a new flouring mill will be erected here; estimated cost, $40,000.

CREUSOT, FRANCE.—Reports state that Schnieder & Co. will soon erect large iron works on the Mediterranean coast, and are to send out specifications for machinery and supplies. It is said that a large part of their orders will be sent to the United States. The same firm will also erect blast furnaces at Piombino, Italy, for smelting ores from the island of Elba.

GAS PLANTS.

YATES CENTER, KAN.—The citizens of this town have raised $2,300 by subscription for the purpose of prospecting for gas. It is reported that work will commence at once.

NEW COMPANIES.—Petaluma Gas & Electric Co., Petaluma, Cal.; Galen Burdell, of Burketts' Station; John M. Coleman, Petaluma.

Manufacturers' Gas Co., Greenfield, Ind.; $12,000; to bore for gas; H. W. Streeter, F. G. Banker and G. W. Morehead.

Crescent Oil & Gas Co., Hartford City, Ind.; $25,000; gas and oil; Geo. W. Amsden, Chas. W. Fulton.

Globe Coal & Coke Co., Farnum, W. Va.; $100,000; to develop coal, oil and gas; R. W. Affleck, J. H. McConanhey, R. W. McCoy, Columbus, O.

Central Texas Oil Co., Austin, Tex.; $5,000, to bore for oil, asphaltum and natural gas near Elgin and McDade, Texas; Nelson Davis, I. Heidenheimer, W. H. Thaxton.

Rutland Heating Co., Rutland, Vt.; $100,000; gas for light, heat and power; David A. Brody, 57 Broadway; N. T. Sprague, Sprague National Bank; Stewart L. Woodford, 18 Wall St., New York; Q. S. Backus, Brandon.

Washington Incandescent Light Co., Columbus, O.; $75,000; oil burning apparatus; L. R. Acker, Wm. Z. McDonald, H. C. Mayers, Columbus.

L. Roby Oil Co., Toledo, O.; $5,000; drill for oil; Jas. H. Dowland, Henry J. Borth, Chas. C. Needham, Furman J. Stout, Jay F. Townsend, all of Toledo.

Cincinnati Natural Gas & Illuminating Co., Cincinnati, O.; George Bullock, John Omwake, John B. Morris, Maurice J. Freeburg, Jas. J. Hooker, Cincinnati.

MISCELLANEOUS CONTRACTS.

PARK.—Worcester, Mass.—It is proposed to lay out a new park and boulevard in South Worcester. Jas. F. Timon is interested.

DAM.—Louisville, Ky.—Bids are asked until May 29 for steel, iron and wood work for movable dam. Capt. Geo. A. Zinn, U. S. Engr.

FIRE-ALARM SYSTEM.—Washington, Pa.—According to reports, the council has decided to put in a fire-alarm system, to cost $5,500.

BULKHEADS.—Boston, Mass.—Bids are asked until May 8 for building timber bulkheads on Summer St. extension. William Jackson, Cy. Engr.

HARBOR WORK.—New Orleans, La.—Bids are asked until June 8 for improving Bayou Plaquemine, La. Maj. Jas. B. Quinn, U. S. Engr.

DREDGE.—New Orleans, La.—Bids are asked until June 8 for the hire of three dredges for work in different places. Maj. Jas. B. Quinn, U. S. Engr.

STEPS.—Easton, Pa.—Bids are asked until May 18 for building granolithic steps on line of 8th St., between Northampton and Pine Sts. H. R. Fehr, Cy. Engr.

PIER.—Wilmington, Del.—The Philadelphia & Reading Ry. Co. proposes to construct a pier on the Delaware River near this city for the handling of coal.

DREDGING.—Grand Rapids, Mich.—A contract has been awarded to the Green Dredging Co., Chicago, at about $35,000 for dredging on the east shore of Lake Michigan.

MEMORIAL ARCH.—Redwood City, Cal.—It is reported that a contract has been awarded to the McGilvral Stone Co. to erect a memorial arch at the university at $67,856.

EXCAVATING.—Brooklyn, N. Y.—Bids are asked by the department of parks, Arsenal, Central Park, New York, until May 11, for 11,000 cu. yds. of excavation at Red Hook Park.

FIRE-ALARM SYSTEM.—New Orleans, La.—Bids are asked until May 2 for furnishing a fire-alarm system, as stated in our advertising columns. W. S. Douglass, Comptroller.

PARKS.—Yonkers, N. Y.—Mayor Sutherland has appointed Frederick H. Garnjost, Ethelbert Embree and others as commissioners to locate sites and spend $100,000 on parks for the city.

WHARF.—Chattanooga, Tenn.—It is reported that the Tennessee River Navigation Co. has decided to spend $60,000 in improving the wharf along the company's portion of the river front.

STEAM BARGE.—Milwaukee, Wis.—Bids are asked until May 12 for the services of a steam barge of about 500 tons freight capacity, as a light house tender. Capt. J. G. Warren, U. S. Engr.

PIER.—New York, N. Y.—Bids are asked by the department of docks, Pier A, North River, until May 12 for building a new wooden pier with appurtenances at the foot of Rutgers Slip, East River.

TRAMWAY.—Augusta, Me.—The Maine Insane Hospital wants bids for a tramway, excepting power, from the wharf to coal pocket, 1,046 ft., rise 150 ft., to carry 30 tons per hour. M. S. Campbell, Treas.

DREDGING.—Keyport, N. J.—Bids are asked until June 3 for dredging in Shoal Harbor, and Compton Creek, Mattawan Creek, and Keyport Harbor, N. J., as stated in our advertising columns. Col. J. W. Barlow, Army Bldg.

TOW BOAT.—Zanesville, O.—Bids are asked until May 9 for the hire of a tow boat with cylinders about 10 ft. in diameter, with 4-ft. stroke, for the Muskingum River Dredging. Maj. W. H. Bixby, U. S. Engr., Zanesville.

TUNNEL.—New York, N. Y.—It is announced by ex-United States District-Attorney Henry S. White, of New Jersey, that the sale of the Hudson River Tunnel, which was to take place May 2, is postponed to June 2.

PIERS.—Hoboken, N. J.—The Ocean Steamship Co., of Savannah, proposes to construct two piers, 60 ft. wide and 500 and 580 ft. long, respectively. Plans have been prepared by Capt. Wm. F. Whittemore, according to reports.

REMOVING ROCK.—East River, N. Y.—Bids are asked until June 3 for excavating and removing Man-o'-War Rock, East River, N. Y. H., as stated in our advertising columns. Maj. H. M. Adams, U. S. Engr., Army Bldg., New York.

JETTIES.—St. John's River, Fla.—Bids are asked until May 31 for delivering 60,000 tons of stone in place in jetties at the mouth of St. John's River, as stated in our advertising columns. Lieut.-Col. W. H. H. Benyaurd, U. S. Engr., St. Augustine, Fla.

Bids Received at Independence, Mo., April 15, 1899, for Constructing Sewers:

Items		M. S. Jackson, Cedar Rapids, Ia.	Colyer Bros., Independence, Mo.	Matt & Roberts, Jefferson City, Mo.	Black & Laird, Des Moines, Ia.	Nevins & Johnson, Kansas City, Mo.		Jas. G. Glennon, Kansas City, Mo.		Katz Crandall, Omaha, Neb.	Geo. W. Shaw, Independence, Mo.
Lines.. A	15-in. sewer	$0.65	$0.66	$0.54	$0.65	$0.51		$0.75		$0.54	.....
	12-in. "	.50	.53	.49	.458	.40		.63		.44	...
	10-in. "	.35	.50	.44	.33	.32		.44		.36	...
B	15-in. "	.70	.66	.65	.724	.58		.845		.59	...
	12-in. "	.51	.53	.55	.48	.45		.69		.46	...
	10-in. "	.35	.50	.50	.34	.35		.57		.41	...
D	10-in. "	.47	.55	.50	.41	.40		.57		.39	...
	8-in. "	.40	.50	.40	.356	.35		.48		.36	...
E	10-in. "	.57	.58	.50	.423	.42		.57		.44	...
	8-in. "	.45	.55	.45	.37	.35		.48		.39	...
F	10-in. "	.40	.50	.42	.29	.31		.43		.34	...
G	8-in. "	.69	.55	.50	.385	.32		.505		.39	...
M	18-in. "	.91	1.05	.80	.78	.10		1.07		.85	...
	15-in. "	.77	.70	.65	.646	.56		.845		.65	...
	12-in. "	.57	.65	.55	.45	.42		.69		.49	...
	8-in. "	.47	.58	.40	.356	.33		.50		.45	...
N	8-in. "	.35	.52	.40	.295	.27		.41		.37	...
P	10-in. "	.57	.68	.60	.40	.38		.60		.55	...
	8-in. "	.53	.63	.55	.356	.35		.51		.49	...
Q	8-in. "	.47	.58	.40	.345	.34		.43		.39	...
R	10-in. "	.45	.58	.60	.35	.35		.53		.41	...
	8-in. "	.37	.53	.55	.315	.30		.43		.35	...
I	8-in. "	.39	.62	.35	.35	.28		.36		.33	$0.46
J	8-in. "	.35	.68	.35	.35	.30		.38		.35	.46
Manholes, 10 ft.		30.00	38.00	20.00	31.50	28.00		35.00		42.50	45.40
For 1 ft., more or less, a ft.		.50	3.80	2.00	2.00	1.50		2.00		2.00	1.00
Cast iron, a lb.		.035	.02	.02	.03	.04		.015		.04	.04
Wrought iron, a lb.		.05	.02¼	.05	.05	.06		.03		.04	.035
Concrete, a cu. yd.		4.00	5.00	4.00	4.50	4.00		4.50		5.00	3.00
Gravel, a cu. yd.		4.00	4.00	1.00	3.00	1.20		4.00		2.50	3.00
Oak piling, a ft.		.75	1.00	.35	.50	1.10		.75		.35	.50
Pine lumber, a M. ft.		25.00	22.00	25.00	16.00	20.00		20.00		18.00	20.00
Oak lumber, a M. ft.		40.00	25.00	30.00	30.00	28.00		25.00		30.00	30.00
Rock excavation, a cu. yd.		3.50	4.75	3.85	4.50	2.50		2.75		2.00	3.00
Embankment a cu. yd.		.30	.25	.35	.30	.18		.25		.20	.25
Brick masonry, a cu. yd.		7.00	4.00	9.00	8.00	6.00		6.00		9.00	6.25
Rubble masonry, a cu. yd.		4.00	4.50	4.50	6.50	3.50		4.50		8.00	4.00
Total		$20,640	$24,707	$19,521	$17,699	$15,282		$22,744		$19,334	$2,789

Lines I and J were let to Matt & Roberts; balance to Black & Laird.

TELEPHONE LINE.—Detroit, Mich.—It is announced that the Michigan Telephone Co. will build a line to St. Clair Flats; the work requires several thousand feet of submarine cable to go under the various channels of the St. Clair River. C. J. Glidden, Pres.

JETTY WORKS.—Boston, Mass.—Bids are asked by harbor and land commissioners until May 11 for strengthening the jetties at the entrance to Menamsha Inlet, Martha's Vineyard, with granite quarry grout; requiring about 1,800 tons of stone; appropriation, $5,000.

DRAINAGE SYSTEM.—New Orleans, La.—Bids are asked until July 5 for constructing the Meipomene and Algiers pumping stations, and for constructing lined and unlined canals for the drainage system, as described in our advertising columns. R. M. Walmsley, Pres. Drainage Comn.; A. Schreiber, Secy.

CONTRACT PRICES.

PARKWAY.—Revere Beach, Mass.—The following bids were received by the Metropolitan Park Commission, Boston, April 23, for surfacing and other work in connection with the Revere Beach Parkway; Wm. T. Pierce, Ch. Engr.; contract awarded Coleman Bros.:

Bids Received at Revere Beach, Mass., April 23, 1899, for Surfacing and Other Park Work.

Quantities.		J. J. Welch & Co., Salem.	Mc-Cusker Bros., Waltham.	Mirick & Wentworth, Malden.	T. Stuart & Son, Boston.	T.H.Gill, Somerville.	C. C. Craib, Boston.	Coleman Bros., Charlestown.
Grading: Earth	3,600 cu. yds.	$0.50	$0.40	$0.32	$0.33	$0.39	$0.30	$0.20
Filling material, to furnish	2,200 " "	.68	.90	.83	.90	.89	.90	.50
8-in. pipe drain	260 lin. ft..	.30	.25	.25	.35	.24	.18	.25
10-in. " "	130 " "	.40	.30	.30	.42	.27	.24	.35
12-in. " "	260 " "	.48	.42	.40	.48	.45	.30	.40
15-in. " "	440 " "	.65	.55	.50	.65	.65	.40	.60
4-in. under drain	3,500 " "	.40	.12	.32	.38	.24	.33	.35
Brick masonry	35 cu. yds.	11.50	13.00	12.50	12.00	14.00	10.50	12.00
Edgestones	2,120 lin. ft..	.95	.91	.95	1.00	1.15	1.00	.90
Surfacing: Gravel walk	440 cu. yds.	1.00	1.25	1.20	1.50	.94	1.00	1.00
Broken stone	3,150 tons....	1.95	1.85	1.88	1.70	1.59	1.40	1.75* 1.50
Loam	3,300 " "	1.30	1.25	.95	.85	1.00	1.00	1.00
Total		$18,526	$17,182	$16,563	$16,414	$16,353	$15,185	$15,104*

*Price for trap rock; for other stone, $1.50 and total of $14,317.

DREDGING.—New York Harbor, N. Y.—Maj. Henry M. Adams, U. S. Engr., Army Bldg., New York, informs us that the following bids were received April 26, 1899, for dredging Bay Ridge and Red Hook channels, New York Harbor, as advertised in Engineering News:

Bidder.	18,000,000 cu. yds.	Total.
American Dredging Co., Philadelphia..	$0.20	$3,600,000
W. H. Beard Dredging Co., New York	.255	4,590,000
R. G. Packard Co., New York	.335	6,000,000
W. H. Beard Dredging Co., New York	.1675	3,015,000
Morris & Cumings Drdg Co., New York	.1515	2,727,000
Morris & Cumings Dredging Co.	.2440	4,392,000
P. Sanford Ross (Inc.), Jersey City	.175	3,150,000

RACE TRACK.—Nazareth, Pa.—We are informed that the following bids were received April 22, 1899, by O. H. Knecht, Secy. Northampton County Agricultural Society, for constructing a half-mile regulation race track, as advertised in Engineering News; there will be 40,000 yds. of cutting, and 5,500 yds. of top dressing; (1) being for earth excavation, (2) for loose stone, (3) for solid rock, (4) for top dressing: John Dolan, Elizabeth, N. J., (1) 24 cts. a cu. yd., (2) 37 cts. a cu. yd., (3) 80 cts. a cu. yd., (4) 37 cts. a cu. yd.; T. Sommers, Erie, Pa., (1) 19½ cts., (2) 35 cts., (3) $1, (4) 28 cts.; B. B. Gonder, Elizabethtown, Pa., (1) 25 cts., (2) 40 cts., (3) 75 cts. and (4) 30 cts. The contract was let to John Dolan.

DREDGING.—Cleveland, O.—We are informed that the following bids were received April 26, 1899, for dredging in the harbor, as advertised in Engineering News; Col. J. A. Smith, U. S. Engr.:

	A cu.yd.
Buffalo Dredging Co., Buffalo, N. Y.	$0.19
G. H. Breymann & Bros., Toledo, O.	.13½
Carkin, Stickney & Cram, Detroit, Mich.	.19
James Rooney, Toledo, O.	.18
Sam'l O Dixon, Milwaukee, Wis.	.15
The L. P. & J. A. Smith Co., Cleveland, O.	.12⅞
James Pryor, Houghton, Mich.	.14½

STREET SIGNS.—Newport, Ky.—We are informed that the following bids were received April 24, 1899, for furnishing blue enamel steel street signs, with white letters, put up in place: E. C. Hoyer, 53 cts. each; F. L. McLane, 52⅝ cts.; National Enamel Works, 49 cts.; E. C. Wendt, 48 cts. (accepted).

SEWERS.—Independence, Mo.—H. H. Pendleton, Cy. Engr., informs us that the following bids were received April 15, for constructing sewers:

BROKEN STONE.—New York, N. Y.—The following bids were received April 28, 1899, for the purchase and removal of about 235,000 cu. yds. of broken stone owned and stored near Spuyten Duyvil, as advertised in Engineering News; all local bidders; Maj. H. M. Adams, U. S. Engr.:

Bidder.	A cu.yd.	Total.	Time to complete.
H. P. Sheridan, 22 State St.	$0.68	$159,800	18 mos.
F.W.McNeal Co.,80-82 Reade St.	.3497	82,180	300 d'ys.*
J. P. Conkling, 44 Broadway	.38	89,300	300 "
Charles Frey, Jr., 411 4th Ave.	.495	116,325	600 "
Manhattan Con. Co., 39 E. 42d St.	.60	141,000	700 "
J. A. Bouker, 110 Wall St.	.30	70,500	500 "
J. C. Rodgers, 536 W. 152d St.	.35	82,250	2 yrs.
Farrell & Hopper, 215 W. 125th†	.50	100,000	1 yr.
R. G. Packard Co., New York	.397	93,295	4¼ yrs.
J. C. Smith, 1090 Broadway	.36	84,600	2 "

*Working days. †Bid on 200,000 cu. yds.

ASPHALT PAVING.—Meriden, Conn.—W. S. Clark, Cy. Engr., informs us that the following bids were received April 27, 1899, for asphalt paving, and contract awarded the So. New England & Paving Co.; (1) being Sicilian Asphalt Paving Co., Times Bldg., New York; (2) Boston (Mass.) Asphalt Paving Co.; (3) Southern New England & Paving Co., Hartford, Conn.:

		1.	2.	3.
Sheet asphalt	4,200 sq. yds.	$2.58	$3.00	$2.90
New curb	1,250 lin. ft..	1.10	1.00	.88
Old curb	250 " "	.60	.55	.53
Concrete tie	780 " "	.60	.62	.28
Total		$12,829	$15,731	$13,883

PAVING.—Bay City, Mich.—Local papers state that the following bids were received by the bridge commission for paving the west end approach to the 3d St. bridge. The approach is 800 ft. long, and will require 3,888 sq. yds. of paving: Peter Peterson, cedar pavement on plank foundation, 98 cts. a sq. yd.; macadam, 63 cts.; railway track, $2 a lin. ft. Hugh Campbell, cedar paving, 98 cts.; macadam, 70 cts.; railway track, $1.80. W. J. Mahar, cedar paving, $1.02; macadam, 80 cts.; railway track, $2.02.

BRICK PAVING.—Meadville, Pa.—D. T. McKay, Jr., Cy. Clk., writes us as follows: The bids for paving 27,900 sq. yds. with brick, which were opened April 13, were acted on by the councils on April 20, resulting in letting the following contracts: Pine St., 13,465 sq. yds., to Jas. McAfee & Co., Allegheny, Pa., using Franklin, Pa., wire-cut, shale brick, $1.49 a sq. yd.; total, including storm sewer, $29,939. North St., 10,680 yds., Frederick Robinson, Meadville, using Brady Run wire-cut, fire-clay brick, $1.46; total, including storm sewer, $7,533. Northern Market St., 3,755 yds., Thos. McGingan, Meadville, using Brady Run, wire-cut, fire-clay brick, $1.55; total, including storm sewer, $20,425.

PUBLIC LIGHTING.—Nanticoke, Pa.—The following bids were received by the council April 25, 1899, for public lighting: People's Electric Light & Power Co., of Nanticoke, one-year contract, arc lights, $87.40 a light; incandescent lights, $22.50 each a year. Two-year contract, $80 per arc light; incandescent, same as one year. Three-year contract, $75 per arc light; incandescent, same as one year. Five-year contract, $70 per arc light; incandescent, same as one year. Welsbach Gas Light Co., one-year contract, not less than 100 lights, $31 a light; two-year contract, $30.50; three-year, $29; five-year, $28 per light.

BRICK PAVING.—Anderson, Ind.—Chas. H. Daniels, Anderson, has been awarded the contract for brick paving in 10th, 12th and Jackson Sts., at $1.24 a sq. yd.; curbing at 65 cts. a ft., and sidewalks at 13½ cts. Benj. Lukins & Son have the contract for sidewalks in W. 11th St. at 15¼ cts.

WATER-WORKS EXTENSION.—Frederick, Md.—The board of aldermen has let the following contracts for material for extending the water-works: M. J. Drummond & Co., New York, 190 tons 12-in. pipe, weight 65 lbs. a ft., $21.65 a ton; 465 tons 12-in. pipe, 75 lbs. a ft., $21.65 a ton; 2 tons of special castings, $45 a ton. F. W. Dilks & Co., Troy, N. Y., 6 12-in. hub double water valves, $36.10 each; 6 4-in. hub double water valves, $8.08 each; 10 poppet air valves, $4.75 each; 22 valve boxes, $3 each. The contract for lead, calking, etc., was let to J. E. Ogden, New York. The total cost for this material is about $14,757.

REMOVING RESERVOIR, ETC.—New York, N. Y.—The following bids were received by the department of parks April 27 for removing the Forty-second St. reservoir, and for building the foundations for the new library; street is 40 ft. between curbs. City pays half and property-owners pay other half of cost. The rate assessed will be about $1.80 per front ft., the lowest price yet for brick street improvement.

PAVING STONE.—Salem, Mass.—S. S. Merrill has been awarded the contract for furnishing about 100,000 paving stones at $37.99 a 1,000, one cent less than last year. The contract for edge stone has been let to J. M. Parsons for 3,000 ft. at 36 cts. a ft.; S. S. Merrill bid 37⅞ cts. a ft. The contract for 200 ft. of circular edge stone for corners has been let to J. M. Parsons for 83 cts. a ft., S. S. Merrill's bid being 75 cts. a ft. The contract for 3,000 yds. of concrete walk has been let to Cardiff & Caron at 26 cts. a yd., the other bids being some ten cents higher.

SEWERS.—Concord, Mass.—Leonard Metcalf, Engr., 89 State St., Boston, Mass., writes us that the bid of T. W. Kinser & Sons, given in our list of the bids received April 10 for completing the system, published in our issue of April 20, was not an actual bid of Kinser & Sons this year, but was their bid of last year, and was put in with the other bids merely as a basis of comparison.

ENGINEERING MATERIAL PRICES.

TRACK MATERIALS—

New York—Angle bars, 1.35 cts. to 1.40 cts.; spikes, 1.70 cts. to 1.80 cts.; track bolts, 2.10 cts. to 2.20 cts.

Chicago—Angle bars, 1.40 cts. to 1.50 cts.; spikes, 2.15 cts. to 2.20 cts.; track bolts, hexagonal, 2.25 cts. to 2.30 cts.; square, 2.15 cts. to 2.25 cts.

RAILS, STEEL—

New York, new, $25.00.

Chicago, new, $26.00 to $28.00; old iron, $18.00 to $18.50; steel, $11.50 to $13.50.

Pittsburg, new, $25.00; old iron, $18.00 to $18.50; old steel, $12.50 to $13.50.

STRUCTURAL STEEL—

New York—Beams, 1.63 cts. to 1.75 cts.; channels, 1.63 cts. to 1.75 cts.; tees, 1.70 cts. to 1.75 cts.; angles, 1.55 cts. to 1.60 cts.; rivets, 1.85 cts. to 1.90 cts.

Chicago—Beams, 1.75 cts. to 1.85 cts.; channels, 1.75 cts. to 1.85 cts.; tees, 1.70 cts. to 1.80 cts.; angles, 1.65 cts. to 1.80 cts.

Pittsburg—Beams, 1.50 cts. to 1.60 cts.; channels, 1.50 cts. to 1.60 cts.; tees, 1.55 cts.; angles, 1.50 cts.; zees, 1.50 cts.

Limestone, New York, cu. ft., 65 cts. to 90 cts.

Ohio freestone, New York, cu. ft., 85 cts. to 90 cts.

Slate, No. 1, Bangor, per square, $4.25 to $5.25.

White lead, American, per lb., 5⅝ cts. to 6 cts.

Lime, common state, per bbl., 75 cts.

Bids Received at New York, April 27, 1899, for Removing the 42d St. Reservoir and for Building Foundations for the New Library.

Bidder.	Lump sum for removing reservoir. Sec. 1.*	Sec. 2.†	Sec. 3.§	Section No. 4. Earth excavation, Cellars, to av'ge dpth 10 ft., blw. grde 97, 38,000 cu.yds.	For foundations, sheet piling to depth 5 ft., blw. grde 87, 5,800 cu.yds.	depth 5 ft., blw. grde 82, 5,800 cu.yds.	Rock excavation, 1,800 c.yds.	Concrete foot'gs, 95,000 cu.ft.	Rubble masonry, foundation, walls, 500,000 cu.ft.	Brick work, 500,000 cu.ft.	Back filling, 2,100 cu.ft.	Test borings, 1,000 ft.	Total.
United Company, Park Row Bldg., New York	$198,891	$196,000	$198,000	$0.95	$1.00	$1.10	$2.75	$0.18	$0.15	$0.37	$0.23	$0.12	$145,470
Prescott, Buckley & Callanan, Albany, N. Y.	108,000	108,000	115,000	.90	1.00	1.25	3.40	.90	.22	.30	.60	2.00	194,498
Crimmins & O'Rourke, 50 E. 59th St., New York	163,000	165,000	167,000	1.25	1.35	1.50	3.00	.25	.15	.30	1.50	1.00	169,300
Sturgis & Hill Co.	196,325	209,680	211,490	1.05	1.05	1.05	1.75	.25	.12	.29	.05	.30	139,320
Farrell & Hopper, 26 Cortlandt St. New York.	117,000	109,728	110,250	.96	1.02	1.14	4.08	.35	.15	.42	.01	1.20	170,802
P. J. Carlin & Co., 26 Court St., Brooklyn, N. Y.	274,000	264,000	267,000	1.00	1.05	1.80	3.00	.22	.10	.345	.25	7.00	141,339
Norton & Dalton, 125th St. and Lexington Ave., New York	95,000	89,000	89,000	.75	.85	.85	2.50	.30	.15	.36	.01	1.00	147,360
Bart Dunn, 28 Chambers St., New York	116,000	104,000	106,000	1.00	1.40	1.40	1.50	.21	.145	.30	.30	.50	149,014
Eugene Lentilhon, 11 Broadway, New York.	115,500	103,500	107,000	1.20	1.97	1.97	.30	.22	.0975	.2699	.005	1.60	140,242
Frawley & Rooney, New York.	172,639	169,889	175,389	1.30	1.75	1.75	.50	.25	.10	.2725	.02	1.00	147,250
Alger C. Gildersleeve, 39 Cortlandt St., New York	178,970	160,970	162,300	1.84	2.04	2.24	3.00	.28	.15	.34	.35	.30	178,130
I. A. Hopper, 219 West 125th St., New York.	235,250	18,000	7,500	1.05	1.55	1.55	1.50	.30	.10	.30	.50	.50	139,620

*Carried away and disposed of by contractor. †Carried away, etc., excepting only that 18,000 cu. yds. of cut and face stone and best rubble stone from walls to be stacked on site. §Carried away, etc., excepting 7,200 sq. ft. of battered face-cut stone, 1,050 yds. of face stone from masonry (main walls), 600 cu. yds. of rough stone for rubble work, and 5,500 sq. ft. of coping, shall be cleaned and delivered at Riker's Island. From the best of the remaining masonry a certain portion shall be cleaned and stacked.

REPAIRING BRIDGE PIER.—Georgetown, D. C.—We are informed that the following bids were received April 27, 1899, by Lt.-Col. C. J. Allen, U. S. Engr., Washington, for repairing pier 4, Aqueduct Bridge, as advertised in Engineering News: (1) being for repair and maintenance of falsework and cofferdam; (2) for pumping out cofferdam; (3) for removing falsework and cofferdam; (4) removal of old masonry; (5) excavation, including removal of debris; (6) for concrete; (7) for quarry-faced ashlar masonry; (8) for interior header work; (9) for rubble masonry; (10) for removing and resetting coping; (11) for repair of iron trusses: Geo. C. Esher, Washington, (1) $4,000; (2) $3,000; (3) $5,000; (4) $3 a cu. yd.; (5) $5 a cu. yd.; (6) $8; (7) $45; (8) $48; (9) $4; (10) $5; (11) $50; total, $44,300; time, 6 months. Engineering Contract Co., 71 Broadway, New York, (1) $1,500; (2) $2,000; (3) $4,000; (4) $8; (5) $5; (6) $15; (7) $30; (8) $30; (9) $10; (10) $12; (11) $500; total, $45,112; time, Dec. 1, 1899. Albert Weber, Baltimore, Md., (1) $5,000; (2) $6,000; (3) $2,000; (4) $12; (5) $12; (6) $25; (7) 18; (8) $35; (9) $10; (10) $18; (11) $500; total, $54,623; time, July 1, 1900. Central Contracting Co., 49 Cedar St., New York, (1) $2,400; (2) $1,800; (3) $3,600; (4) $5; (5) $5; (6) $14; (7) $23; (8) $35; (9) $10; (10) $12; (11) $300; total, $37,747; time, Nov. 30, 1899.

BRICK PAVING.—Van Wert, O.—We are informed that the following bids were received April 24, for 30,324 yds. of brick paving:

Bids Received at Van Wert, O., April 24, 1899, for Brick Paving.

Bidder.	Block, Nelsonville.	Buckeye.	Metropolitan (Canton)	Wire-cut, Canton.	Block, Athens.	Wassel.	Medal.	Buckeye brick.
Gaudert Bros, Mansfield, O.	$0.715	$0.70	$0.77	$0.74	$0.81	$0.715	$0.81	$1.44
Davis & Archer, Bellaire, O.	.74	.72	.80	.77	.83	.74	.83	1.52
J. A. Foster & Co., Attica, Ind.	.745	.73	.81	.775	.84	.745	.84	1.61
Geo. B. Herring, Mansfield, O.	.7175	.7025	.7725	.7325	.8125	.7175	.8125	1.51
D. R. McArthur, Kenton, O.	.705	.69	.77	.76	.80	.705	.80	1.47
Henry Gaunts, Columbus, O.	.69	.675	.76	.725	.792	.69	.792	1.51
Gullivan & Graham, Columbus, O.	.88	.85	.94	.91	.95	.88	.97	1.60
Ireland & Co., Middlepoint, O.	.665	...	.73	.715	.76	.665	.76	1.50

FROST JACKETS.—Minneapolis, Minn.—The following bids were received at a meeting of the council April 28, 1899, for furnishing frost jackets for hydrants: S. T. Ferguson, $6.50 each; Gillette-Herzog Mfg. Co., $9.90; South Park Foundry & Machine Co., $7.35; Crown Iron Works Co., $11.96. 30 tons pig lead: Janny, Semple, Hill & Co., $4.25 a 100 lbs.

BRICK PAVING.—Newport, Ky.—W. L. Glazier, Cy. Engr., writes us that the following contract was let April 26, 1899, to John Trapp, Dayton, Ky., for brick paving in 6th St., York to Columbia Sts., as advertised in Engineering News: Concrete curb and gutter, 820 ft., 50 cts.; brick paving, 1,750 yds., 78 cts.; 6-in. concrete base, 1,750 yds., 44½ cts.; excavating, 900 cu. yds.; 16 cts.; catchbasins, $15; sundries, $15; total, $2,802. The other bids for the brick paving and the 6-in. concrete base were as follows: Van Sandt & Meeds, Cincinnati, 86 cts. and 44 cts., respectively; Jos. Callopy, Newport, 91 cts. and 48 cts.; T. C. Brown, Newport, $1.00 and 50 cts. The

PLATES AND SHEETS—

New York—Universal mill plates, 2.00 to 2.15 cts.; tank, 2.30 cts. to 2.40 cts.; shell, 2.45 cts. to 2.50 cts.; flange, 2.55 cts. to 2.60 cts.; firebox, 2.60 cts. to 2.75 cts.

Chicago—Universal mill plates, 2.15 cts. to 2.20 cts.; tank, 2.50 cts.; shell, 2.40 cts. to 2.45 cts.; flange, 2.35 cts. to 2.45 cts.; firebox, 3.50 cts. to 4.50 cts.; sheets, 2.75 cts. and upwards.

Pittsburg—Universal mill plate, 2.10 cts.; tank, 2.10 cts. to 2.25 cts.; shell, 2.15 to 2.25 cts.; flange, 2.30 cts. to 2.50 cts.; firebox, 2.50 cts. to 3.25 cts.; sheets, 2.75 cts.

MERCHANT STEEL—

Machinery per lb., 2.30 cts. to 2.40 cts.

IRON—

Pig iron:

New York—No. 1, $15.75 to $16.25; No. 2, $15.25 to $15.75.

Chicago—No. 1, $15.50 to $16.00; No. 2, $15.00 to $15.50.

Pittsburg—No. 1, $14.50; No. 2, $15.00.

Bar iron:

New York, common, 1.40 cts. to 1.50 cts.; refined, 1.50 cts. to 1.60 cts.

Sheets:

Common, American, per lb., 2.42 cts. to 3.20 cts.

LUMBER—

New York:

Hemlock timber, 20 ft. and under, per M, $13.00.

Piling, Eastern spruce, 35 to 40 ft., 30 to 40% 12-in. butts, 4.00 cts.

Spruce, special cargoes, per M, $15.00 to $18.00.

Yellow pine, random cargoes, $18.00 to $20.00.

North Carolina pine, $2.25 to $2.40 advance over Norfolk rates.

San Francisco:

Oregon pine, per M, $15.50 to $17.50.

Redwood, per M, $18.20 to $20.00.

Redwood tank stock, up to 10 ft., $24.00 to $25.00.

GENERAL MATERIALS—

Lead, New York, 4.32 cts. to 4.35 cts.

Solder, per lb., 14½ cts. to 15 cts.

Spelter, per lb., 6.75 cts. to 7.00 cts.

Copper ingots, 19.25 cts.

Granite, rough, New York, cu. ft., 40 cts. to 50 cts.

INDUSTRIAL NOTES.

THE CARBOLINEUM WOOD-PRESERVING CO., Nashville, Tenn., has removed its New York office from 21 Cliff St. to the new Park Row Building, 15-21 Park Row.

THE MELAN ARCH CONSTRUCTION CO., New York, has removed its offices from 35 Nassau St. to the new Park Row Building, 13-21 Park Row.

THE WEST SIDE FOUNDRY CO., Troy, N. Y., has lately supplied and erected all the steel and cast-iron work for the new picker house of the Victor Knitting Mills Co., Cohoes, N. Y.

THE OSBORN CO., Cleveland, O., represented by Mr. C. E. Fowler, M. Am. Soc. C. E., 11 Broadway, New York, has been retained as inspector of steel work on the New York & Ottawa bridge over the St. Lawrence River, a large number of bridges for the Big Four Railway, and the Grand Island bridge, at Buffalo.

THE SOUTHERN CAR & FOUNDRY CO. is the name of a new company said to have been organized by the consolidation of the Lenoir City Car Works, Lenoir City, Tenn.; the Elliott Car Co., Gadsden, Ala.; and the Memphis Car Works, Memphis, Tenn. The new company is capitalized at $2,000,000, and the following officers have been elected: Pres., J. M. Elliott, Jr., Gadsden; Vice-Pres., R. Z. Roberts, Lenoir City.

MANNING, MAXWELL & MOORE and their kindred interests, the Ashcroft Mfg. Co., the Shaw Electric Crane Co., the Consolidated Safety Valve Co., the Pedrick & Ayer Co., and the Hayden & Derby Mfg. Co., whose New York offices and salesrooms have been located at 111 and 113 Liberty St., have removed to the new Singer Building, 85-89 Liberty St., corner of Broadway. The ground floor will be devoted to show rooms, and the first floor will be occupied entirely by the business offices.

AMERICAN SHIPBUILDING CO. is the name of a combination of the American Steel Barge Co., the Milwaukee Dry Dock Co., Chicago Shipbuilding Co., Cleveland Shipbuilding Co., Detroit Shipbuilding Co., Globe Iron Works Co., and the Ship Owners' Dry Dock Co. The capital stock of the new company is $30,000,000, of which $7,000,000 is of 7% non-cumulative preferred stock, and $7,000,000 of common stock. Officers have been elected as follows: Pres., W. L. Brown; Vice-Pres., Robert L. Ireland; Secy. and Treas., R. C. Wetmore; Gen. Mgr., James C. Wallace.

THE BERLIN IRON BRIDGE CO., East Berlin, Conn., is furnishing for the United States Government, at Port Caswell, N. C., a steel roof for the new torpedo storehouse. This storehouse is of fireproof construction throughout, and substantially built. The walls are of brick, and the roof consists of steel trusses with purlins, and the covering is of corrugated iron. This company also has the contract for furnishing and erecting the structural steel work, consisting of beams, girders, roof trusses and other material, for the New Britain Institute, New Britain, Conn.

THE GROSHON HIGH-DUTY PUMPING ENGINE CO., East 138th St., New York, has applied for a voluntary dissolution of the corporation. The liabilities are $214,947, of which there is due the De La Vergne Refrigerating Machine Co., $214,196 for money advanced, and to John A. Groshon $751 for services. The assets are said to be about $4,120, consisting of a pumping engine valued at that amount and a lot of patterns and patents, which are put in as of no value. The company was incorporated in July, 1891, with a capital stock of $10,000, to manufacture a high-duty pumping engine.

THE MORGAN ENGINEERING CO., Alliance, O., is said to have received an order for a slabbing mill and all accessories, to cost $100,000, for the Nicopol Mining & Metallurgical Co., of Mariopol, South Russia. The order includes two 46 × 60-in. reversing engines, built by McIntosh, Hemple & Co., Pittsburg, valued at $50,000; various mill tables valued at $20,000, by McGill & Co., also of Pittsburg; four 650-HP. boilers, by Babcock & Wilcox Co., New York; two electric traveling cranes of 15 and 50 tons capacity, manufactured by the Shaw Electric Crane Works, Muskegon Heights, Mich.; a $25,000 Weiss central condensing plant, by the Southwark Foundry & Machine Co., Philadelphia. The Nicopol works, it is understood, employ 3,500 men, and its machinery equipment is about 90% of American manufacture.

THE NEW ENGLAND STRUCTURAL CO., Boston, is building at its Everett works a large addition to its bridge shops. The company has in its shops at the present time the steel frame for a building 300 × 80 ft., to be erected at Windsor, Vt.; a bridge for the Boston & Albany R. R., and is completing its contract for the steel work for the new express building at the Southern Terminal Station, Boston; also its contract for the steel and iron work for the extensive alterations on the historic Faneuil Hall at Boston. The latter building is to be made fireproof throughout, but the original details of finish are to be preserved. This company has the contract for the alterations on a building for the Walworth Mfg. Co., of Boston. Cast-iron columns and steel floor beams are to be used in the construction. It is also just completing its contract for the structural steel and ornamental iron work for the Puritan Trust Company building, on Court St., Boston, for which Messrs. Kendall, Taylor & Stevens are the architects.

Contract Work Should Always be Advertised in a Paper Read by Contractors.

Nearly Every Prominent Contractor and Manufacturer of Contractors' Supplies in North America Reads Engineering News.

PERSONAL
Obituary
ENGINEER
Coming
NEW PUBL
CONSTRUCT
Condense
Railways
Street an
Electric
Bridges
Buildings
Water-W
Sewerage
Garbage
Streets a
Gas Plant
Miscellan
Contract
INDUSTRIA

Mr. C. E.
of Lorain, O

Mr. Richar
ger of the
resigned.

Mr Harrin
the Board o
ark, N. J.

Col. Rober
Board of S
City, N. J.

Mr. Josepl
the Water-W
Hugh F. Do

Mr. Morris
Chamber of
Alexander E

Mr. Oscar
missioned C
Guard of Ne

Mr. John
Chief Engine
Louisville &

Mr. Marc
Secretary o
headquarters

Mr. Willia
appointed S
the Sanitary

Mr. Henry
the Polytech
Dr. David

Mr. J. L.
San Diego,
has just bee

Mr. H. V.
has been ap
lay out the

Mr. Willia
gineering in
Professor of

Mr. Horac
Manager of
of the Oma
Quincy, Ill.

Mr. Andre
Co., of Pitts
so as to be
of his philan

Mr. George
Lackawanna
Vice-Preside
companies o

Rear-Admi
the Navy Y
Paymaster-G
Admiral Ed

Gen. John
gineers of t
an extensive
river and h

Mr. Charl
Engineer to
the city's in
of the water

Mr. Freder
the Delawar
years, has re
Mr. F. F. C
company.

Mr. W. W
the Chicago
Engineer of
tion for the
signed to go

Messrs. Jo
delphia; Ru
York, and S
dence, have
delphia, as
extension a
city of Phil